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Thursday 2nd October 2014

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

Dear Mr Pierce.

RE: ERC0158 Connecting Embedded Generators under Chapter 5A Rule **Change Draft Determination**

As you are aware the Clean Energy Council's membership is predominately composed of generation developers across the full spectrum of the electricity generation industry with the remaining members being businesses which advocate for cleaner energy and the supporting industry.

The CEC thanks the Commission for the progress made to date on the draft rule determination.

The CEC supports the Commission's draft determination. However, as the Commission has elected to preserve the structure of the Chapter 5A negotiating framework the CEC's objectives will remain only partially achieved by the implementation of the draft rule.

As demonstrated in this submission there has been considerable experience with the application of the Chapter 5A negotiating framework. This submission outlines the reasoning for the rule change request's benefits only being partially achieved, and highlights some key recommendations which, while being non-controversial and easily implemented, will provide a large benefit to connecting generators.

These recommendations include:

• Retaining some specific components of the rule change request that relate to timing of the negotiated connection process under Chapter 5A, which will greatly assist generators to manage risk during the connection process and have no material impact on DNSPs.



- Allowing non-registered embedded generators to access the Chapter 5 connection
 process at the start of the process or if they are advised by the DNSP that they have
 to negotiate their connection during the process under Chapter 5A.
- Clarification that where a generator is eligible for a basic or standard connection and
 it is required to negotiate some aspect of that connection, the DNSP's model standing
 offer for the basic connection must form the basis of those negotiations.

In addition to the above the CEC strongly recommends that the final rule seeks to require that DNSPs create at least three standard connection model standing offers for non-registered embedded generators.

As the creation of these offers would clarify the expectations of the connecting generator from the start of the process this change would significantly enhance the ability of many connecting generators to manage their risk and costs in the connection process. As DNSPs reserve the right to negotiate any part of the offer which is not 'standard' or is locational specific, they face no material risk or costs from this inclusion. This change is consistent with the intent of the rule change request; the benefits of making it will far outweigh any costs and will go some way to advance the NEO.

The remainder of this submission sets out the reasoning for the CEC's support of the draft rule and the detailed arguments for the recommendations noted above. Please do not hesitate to make contact on the details below to discuss this submission.

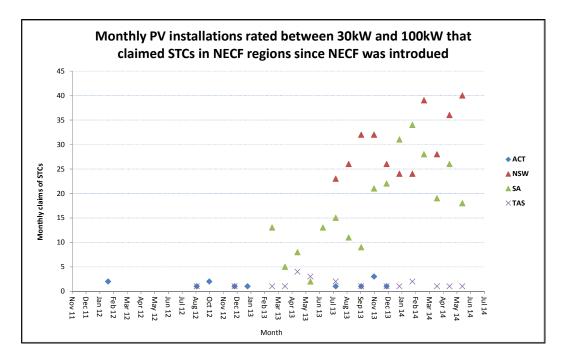
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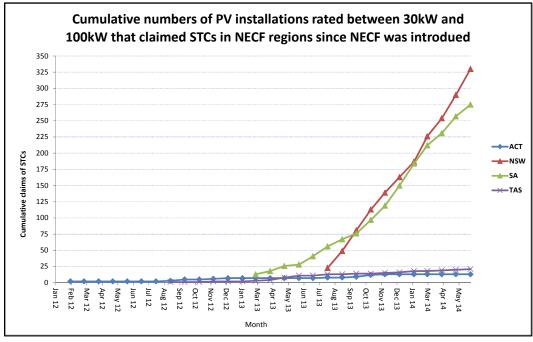
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1 Use of the Chapter 5A negotiating framework

As previously provided to the Commission the two figures below provide evidence that the chapter 5A negotiating framework has been widely used already across NECF regions. The first figure shows the number of solar PV installations rated between 30 and 100kW that have claimed STCs from one month following the introduction of NECF in the relevant regions. The following figure shows the same data on a cumulative basis.







This data was obtained from the Clean Energy Regulator (CER)¹ and provides clear evidence that the Chapter 5A negotiating framework has been well and truly tested. In fact nearly 600 connections have been negotiated in New South Wales and South Australia alone, bringing into question claims of limited experience with the Chapter 5A negotiating framework.

2 The Draft Connection Process

The Commission has stated that in order to advance the National Electricity Objective connection processes should "have the following characteristics:

- meets the reasonable needs of embedded generator connection applicants;
- supports connection services being priced in a cost reflective manner;
- supports connection services being provided at least cost; and
- does not undermine the security and reliability of the distribution network.

To assess this rule change the Commission considers that it should promote the following desired outcomes:

- Transparency;
- Allocation of costs and risks;
- Transaction costs;
- · Security and reliability of supply; and
- Administrative burden³.

The CEC agrees that these outcomes are all desirable and should be balanced to achieve a reasonable outcome in this rule change. The following outlines the CEC's views on the draft connection process, in light of these desired outcomes.

2.1 Negotiating under Chapter 5

The CEC has undertaken a detailed survey of experiences with negotiating a connection from the last two years in NECF regions. This information has already been provided to the Commission and is further supported by the CER data summarised above.

One of the findings of this survey is that generators which would be eligible for a basic connection⁴, but have had to negotiate their connection at the DNSP's request, can expect a

¹ Courtesy of Warwick Johnston, Sunwiz, <u>www.sunwiz.com.au</u>.

² AEMC 2014, Connecting Embedded Generators under Chapter 5A, Draft Determination, 21 August 2014, Sydney, p. 8.

³ Ibid, p. 9.



timeframe between 1 and 12 months to do so. The same timeframe was found for generators which are not eligible for a basic connection (i.e. rated less than 5 MW but above 30 kW).

These outcomes indicate that Chapter 5A is already providing connections under the same timeframes anticipated by the current Chapter 5. Therefore, given the option, it is likely that the Chapter 5 would be utilised by a number of connection applicants which would be eligible for a negotiated connection under Chapter 5A.

This case for accessing Chapter 5 increases for larger non-registered embedded generators as the extent of expected information exchange is commensurate to the technical challenges these developments face. The benefits of the forthcoming revised Chapter 5 process have been previously discussed at length during the Chapter 5 rule change process. The CEC's members believe that these benefits are equally applicable to non-registered embedded generators and optional use of Chapter 5 is supported.

Recommendation – using Chapter 5

1) The Chapter 5 connection processes should be accessible to non-registered embedded generators where desired.

2.2 Negotiating under Chapter 5A

The CEC has already made clear the issues with the process as defined within the current Chapter 5A negotiating framework. In addition the CEC has provided a summary of the experiences if negotiating a connecting under Chapter 5A and evidence that the negotiating framework has been tested. The outcomes of the CEC's surveys are far from positive and demonstrate that the current negotiating framework is not delivering efficient outcomes.

While the CEC understands that the Commission would prefer not to 'reinvent the wheel' by creating a more defined negotiating process in Chapter 5A, it is clear that there are few benefits coming from the current negotiating framework.

Effective management of risk

In making the draft determination the Commission clearly considers that the current negotiating framework allocates risk effectively. However, the CEC's survey results show that over 60 % of generator proponents indicate that they are unable to manage their risks and costs effectively.

⁴ Within NECF regions.



Under the Commission's draft determination some embedded generators will be required to negotiate under Chapter 5A. Acknowledging that where a basic or standard connection contract is in place negotiable aspects of it should be based on that contract initially⁵. Where one is not in place the generator has the option to use Chapter 5, which may, due to the increased complexity, may not be helpful for some embedded generators (especially those rated just above the upper limit of the AS 4777 scope).

The CEC's member's view is that, if this remains the case, these generators would be negotiating through the same process under which they are currently unable to manage their risk (Chapter 5A). Irrespective of the option to use Chapter 5 being introduced, the negotiating framework requires at least some changes to improve the capacity for connecting generators to manage their risk. This would be consistent with the Commission's desired connection process characteristics.

As the monopoly position of DNSPs already gives them the capacity to fully manage their risk the CEC believes that the following minor changes would better meet the Commission's objective in enabling efficient investment in embedded generation, and would remain consistent with the CEC's rule change request⁶.

The CEC notes that they would equally apply to the connection of loads under Chapter 5A. However, these are non-controversial changes that would benefit *all* connecting parties while having negligible impact on DNSPs.

Clause 5A.C.3(b)

Remove the wording "if practicable" from cl. 5A.C.3(b)(1) and add the option to extend the timeframe by agreement.

A 20 business day limit on the provision of information required to negotiate as determined by cl. 5A.C.3(b)(2), with the option to extend timeframes by agreement. The drafting would also remove references to "as soon as practicable".

In paragraph (b)(2) the relationship between the provision of additional information by request from the DNSP by the *connection applicant* and the release of information by the DNSP will be removed. At this point in the process the DNSP has had three (3) prior opportunities to request further information, including

1. Publication of a detailed summary of the information the generator will need to provide; and

⁵ Although this is not clear from Chapter 5A such a response would be expected. If this is the clear intent of Chapter 5A it should be stated as such in the rule.

⁶ See the drafting in the request for specific wording.



- 2. A preliminary enquiry from which the response sets out the information that the applicant needs to provide with the application; and
- 3. An initial application which includes the opportunity to request additional information through clause 5A.D.3(e).

Chapter 5A already allows for the second two requests to delay the process. Following these three opportunities it is no longer reasonable to closely link the provision of information that the applicant needs to negotiate on an informed basis, with further requests for more information from the DNSP.

Further requests by the DNSP should be disconnected from the timing of the release of the information which the applicant requires to negotiate. While the DNSP can request more information at any time via cl. 5A.D.3(a)(2), DNSPs should make the information they need clear early in the process thus reducing the need for repeated requests for additional information from the connecting party.

The CEC is proposing that the wording struck out of paragraph (b)(2) in the rule change request remain struck out in the final rule. This small change significantly enhances the certainty that the DNSP will provide the information that the applicant needs in order to negotiate effectively, while having no material impact on DNSPs.

Clause 5A.D.3

Place a 10 business day time limit on the DNSP's request for additional information, or notification of defective information in the initial application requirements of paragraphs (d) and (e), where the timeframes can be extended by agreement⁷. The absence of any timeframe on these responses creates signifineant uncertainty and increased risk for generator proponents and is inconsistent with the Commission's desired connection process characteristics.

Recommendations – Chapter 5A negotiating framework needs to provide for the effective management of risk by embedded generators

- Irrespective of who uses the Chapter 5A negotiating framework some minor improvements will make significant improvements in enabling applicants to manage their risk more effectively.
- 3) The Chapter 5A negotiating framework needs defined timeframes for responses from the DNSP, which are also extendable by agreement.
- 4) All connection processes should expect that DNSPs make clear the information they need from very early in the process. Multiple requests for additional information should not restrict the obligation for the DNSP to provide information to the applicant.

⁷ See rule change request p. 33.



Selection of a threshold to access Chapter 5

The CEC understands that the Commission's selection of a threshold level is premised on the likelihood that a basic or standard connection contract would be the starting point for any negotiations⁸, should these generators have to negotiate some part of the connection. While this may be the case care must be taken to no confuse the *negotiated connection contract* with the *process* under which negotiations occur. The process is frequently far more complex than the contract itself, and was the subject of the CEC's rule change request.

The issues that the CEC identified with the Chapter 5A negotiation framework remain unresolved by the Commission's draft determination. In addition, despite experience the poor performance of connection processes across the NEM indicates that the option to use Chapter 5 may be of benefit to any embedded generator. In some cases these experiences may lead to generators who have used Chapter 5A preferring to access Chapter 5.

It is not clear that making a distinction in Chapter 5A based on whether a standard or basic connection category applies to a specific generator is a sound basis for setting a threshold.

In the CEC's view *any* negotiated connection should be eligible to access the process under Chapter 5. This would mean that those embedded generators who are comfortable with the Chapter 5A negotiating process can select to us it, while others should be able to elect to use Chapter 5 by making such a request at the following points in the process:

- 1. Prior to the start of the process the applicant should be able to lodge an enquiry relating to Chapter 5 or Chapter 5A (as already included in the draft rule); and
- 2. The point at which the DNSP advises that the connection will be negotiated. Should this be the case, the current cl. 5A.D.3(f) should allow for the option to continue the process under Chapter 5.

The new second option can be implemented on the basis that the information exchanged under chapter 5A up to this point would constitute the connection enquiry being lodged under Chapter 5. This means that the notice that the connection will be negotiated under cl. 5A.D.3(f) the DNSP would also:

- Advise that the applicant has the option to switch to continue with the Chapter 5A negotiating process; or
- Advise that the generator can use the Chapter 5 process, that the information
 exchanged to date is considered the connection inquiry and that the notice meets the
 DNSP's obligations of cl. 5.3A.5(d) to advise of receipt of the enquiry. It should also
 advise that if the Chapter 5 option is selected the generator may request more
 information as per cl. 5.3A.5(c)(3).

⁸ The CEC recommends that this should be made clear in the NER.



The CEC notes that as the DNSP is specifying the content of the application in cl. 5A.D.3(a) there is no additional risk or costs for a DNSP requesting the information it needs to constitute an enquiry for Chapter 5.

Recommendations - Process selection threshold

- 5) The use of Chapter 5 should be based on the connection applicant's preference for process and at the generator's discretion.
- 6) Chapter 5 should be accessible to any embedded generator which has to negotiate any part of a connection.
- 7) The DNSP should advise that the generator can use Chapter 5 at the time the DNSP advises that a connection is to be negotiated, and consider that the progress in Chapter 5A thus far constitutes a Chapter 5 connection enquiry.
- 8) The Rules must clarify that where a generator is eligible for a basic or standard connection and it is required to negotiate some aspect of that connection, the DNSP's model standing offer for the basic connection must form the basis of those negotiations.

Standardisation of connections

The CEC's firm view is that the connection of embedded generators should be standardised to the greatest extent possible. This was also the view expressed by over 90 % of the respondents to the CEC's grid connection experiences survey.

As was made clear by the Ministerial Council on Energy when Chapter 5A was created new "connection frameworks [should] provide substance of the 'obligation to offer connection' placed on distributors" and the intent of Chapter 5A was to ensure that customers have "access to new connections or alterations meeting their requirements in a fair and certain manner, and as quickly as reasonably as possible" 10.

This intent clearly leads to the conclusion that connections should be standardised as far as possible. Although the rule change request did not specifically seek to alter the standard connection category in Chapter 5A, its intent was to create a reasonable level of obligation on DNSPs during the negotiation process. These additional obligations were then intended to

⁹ Ibid, p. 15.

¹⁰ Ibid.



act as a deterrent to DNSPs selecting this process as the fall back from a basic connection service that is not 'simple' 11.

The MCE clearly intended that the connection process be standardised and streamlined to the greatest extent possible. The Commission's draft determination seeks to create no additional obligations on DNSPs. As a result the negotiating framework will continue to be used a 'catch all' for any connection which may require further consideration or effort by the DNSP – the monopoly position of DNSPs means that there is no incentive to do otherwise.

The CEC's members now believe that there is a pressing need for the introduction of standard connections for non-registered embedded generators, where they can be created. Given the diversity across DNSP assets and businesses it is reasonable to expect that the NER should require DNSPs to create at least three standard connection types to apply to non-registered embedded generators. In addition the hundreds of connections that have taken place under Chapter 5A clearly demonstrate that DNSPs have sufficient experience to develop them.

Noting that each DNSP can always use the negotiating framework to negotiate aspects of these standard connection types which may require locational specific considerations (for example) there is no additional risk imposed on DNSPs from creating these classes of connection. In conjunction any administration costs incurred by the DNSP will be passed to connections occurring within each standard class. The benefits this would create for embedded generators who may fall into one of the classes would be significant and would include:

- More up-front information on expectations from the generator, enhancing transparency;
- More efficient transaction costs as the embedded generator would be able to prioritise meeting the DNSP's expectations for a standard connection and minimise the connection timeframes and associated transaction costs;
- Efficient allocation of risk for embedded generators as they would have vision of all expectations from a very early stage and adjust project settings to suit;
- Efficient allocation of risk for DNSPs as they would be responsible for setting the
 parameters for each standard embedded generator class, and would retain the
 capacity to fully investigate and negotiate any aspects of the connection which were
 not consistent with these parameters;
- Ensure that the DNSP retains the final say on any matters which may impact on supply reliability and security; and

¹¹ For example, a basic connection service for which the DNSP believes may require augmentation of the network will also require further investigation. Once this investigation is needed the connection is no longer basic and is considered negotiated by most DNSPs.



 DNSP would have the reduction of their own administrative burden in mind when developing their standard connection classes, in turn connecting generators who comply with these classes would also be able to reduce their own administrative burden¹².

The fact that significant experience has already been built with the Chapter 5A negotiated connection process, and there have been no clear signals of creating standard embedded generator connections, demonstrate that without this small adjustment there is no incentive on DNSPs to implement standard connection for any type of embedded generator. A rules based mechanism is clearly required to achieve the Commission's desired outcomes.

This inclusion would be non-controversial. It would

- 1. Have negligible impact on DNSPs;
- 2. Create significant benefit for embedded generators;
- 3. Remain consistent with the intent of the rule change request;
- 4. Support the desirable connection process characteristics¹³ which the Commission has outlined; and
- Advance the NEO by improving productive efficiency by minimising the overall costs of the connection process, and allocative efficiency by increasing the efficiency of investment in embedded generation respectively.

Recommendation – requirement to create standard connection classes for embedded generators

 Chapter 5A should be amended to require that the DNSP create at least three model standing offers for standard connection services to non-registered embedded generators.

Provision of information

The CEC understand that the Commission's intent is to align the information provided to embedded generators under Chapter 5 with the information provided to non-registered embedded generators who have selected to connect under Chapter 5.

¹² The CEC notes that the administrative burden of each DNSP creating these connection classes and the AER approving them will always be lower than the combined administrative burden faced by the embedded generators connecting under the Chapter 5A or the Chapter 5 in the absence of them.

¹³ AEMC 2014, Connecting Embedded Generators under Chapter 5A, Draft Determination, 21 August 2014, Sydney, p. 8.



This action is fully supported by the CEC's members, along with the publication of the full Information Pack contents¹⁴ and the retention of a register of generating plant¹⁵. The CEC agrees that the benefits of publishing this information will far outweigh the costs of doing so.

An additional benefit to the register of generating plant will come from the continuous development of appropriate standard connection classes for embedded generators. The ongoing publication of experience with generating plant will allow generator proponents and DNSP to more readily understand opportunities for standardisation over time. The continuous evolution of the process in this way will greatly assist in the achievement of the NEO by allowing the relevant stakeholders to continually work towards increased allocative efficiency.

The inclusion of a statement describing the generators for which the DNSP does not have a standard connection class would be useful to many embedded generators as it would provide greater visibility of expectations for the connection process.

The CEC also supports the inclusion of the details of any "*minimum access or plant standards*" ¹⁶ as this would provide greater clarity of the DNSP's technical standards for connection. However, in the case of non-registered embedded generators there are no established technical standards or guidelines for connection. Unlike for the connection of registered embedded generators, Schedule 5.2 does not apply to non-registered embedded generators. The need for technical standards for the connection of embedded generation has already been established¹⁷.

Although the rule change does not create these standards their absence highlights the need for the Information Pack to include the "minimum access or plant standards" in conjunction with the requirements of clause 5.3A.3(b)(6) which specifies more specific technical requirements. As highlighted in the rule change request clarity of these technical requirements is critical to efficient investment in embedded generation.

Recommendation - information availability

10) The Commission's proposal for the publication of information under Chapter 5A should proceed as drafted. The benefits will far outweigh the costs of doing so.

¹⁴ Ibid, p. 16.

¹⁵ Ibid, p. 17.

¹⁶ Ibid, p. 16.

¹⁷ As highlighted by the work being undertaken by the COAG Energy Council.



3 Revised Draft Rules

In order to achieve recommendations set out in this submission the following specific changes to the NER would be required in conjunction with the Commission's draft rule.

Recommendation	NER change
The Chapter 5 connection processes should be accessible to non-registered embedded generators where desired.	As proposed by the Commission and as per Recommendation 5 and 6 below.
 Irrespective of who uses the Chapter 5A negotiating framework some minor improvements will make significant improvements in enabling applicants to manage their risk more effectively. The Chapter 5A negotiating framework needs defined timeframes for responses from the DNSP, which are also extendable by agreement. All connection processes should expect that DNSPs make clear the information they need from very early in the process. Multiple requests for additional information should not restrict the obligation for the DNSP to provide information to the applicant. 	(a)(3) within 20 business days as soon as practicable (or at a another time by agreement between the parties) after the Distribution Network Service Provider receives the connection applicant's application—or, if the Distribution Network Service Provider requests additional information under paragraph (a)(2), as soon as practicable after the Distribution Network Service Provider receives the relevant information.



5)	The use of Chapter 5 should be based on	Cl. 5A.D.3
6)	the connection applicant's preference for process and at the generator's discretion.	(f) The Distribution Network Service Provider must, within 10 business days after receipt of a complete application for a connection service or if the connection applicant is required to provide additional information under paragraph (e), within 10 business days after receipt of the information, (or some other period agreed between the Distribution Network Service Provider and the connection applicant):
		(1) advise the connection applicant whether the proposed connection service is a basic connection service a standard connection service or neither; and
		(2) if;
		(i) the connection service is neither a basic connection service nor a standard connection service or
		 the connection applicant elects to have a negotiated connection contract even though the proposed connection service is a basic or standard connection service;
		advise the <i>connection applicant</i> of the <u>negotiated</u> connection process, and of possible costs and expenses related to the negotiations, that the applicant may elect to continue the connection process under clause 5.3A.
7)	The DNSP should advise that the generator can use Chapter 5 at the time the DNSP advises that a connection is to be negotiated, and consider that the progress in Chapter 5A thus far constitutes a Chapter 5 connection enquiry	(h) should the applicant elect to use clause 5.3A the <i>Distribution Network Service Provider</i> should consider that the connection enquiry has been lodged under clause 5.3A.5 and should advise the applicant of such, along with notice that the applicant can request more information as permitted under clause 5.3A.5(c)(3).
8)	The Rules must clarify that where a generator is eligible for a basic or standard connection and it is required to negotiate some aspect of that connection, the DNSP's model standing offer for the basic connection must form the basis of those negotiations.	Cl. 5A.F.4 (f) Where a negotiated connection offer is required as a result of some departure from a basic or standard connection offer and the connecting party is eligible for such, the basic connection offer or standard connection offer (as the case may be) should form the basis for the negotiated connection offer.



9) Chapter 5A should be amended to require that the DNSP create at least three standard embedded generator connection classes. Output Description:	(a) A Distribution Network Service Provider (1) may submit for the AER's approval a proposed model standing offer to provide standard connection services on specified terms and conditions, and (2) must submit to the AER's approval at least three proposed model standing offers to provide standard connection services, for the connection of non-registered embedded generators, on specified terms and conditions.
10) The Commission's proposal for the publication of information under Chapter 5A should proceed as the benefits will outweigh the costs of doing so.	As proposed by the Commission.