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Clean Energy Council

17/02/2012

Mr Chris Pattas
General Manager
Australian Energy Regulator
GPO Box 520
Melbourne Vic 3001
Submitted electronically via aerinquiry@aer.gov.au

Dear Mr Pattas,

The Clean Energy Council (CEC) appreciates the opportunity to make a submission to the Australian Energy Regulator (AER) on the *Draft Connection Charge Guidelines for Electricity Retail Customers*. In particular the CEC welcomes the clarity which is expected to result from the process of structuring DNSP connection charging polices on a NEM-wide basis through the National Electricity Rules (Rules).

The CEC is the peak body representing Australia's clean energy and energy efficiency industries and works with members and the government to identify and address the barriers to efficient industry development in the energy efficiency and stationary energy sector. Our more than 600 members, covering the renewable energy, energy efficiency and energy storage sectors, provide us with a unique resource to assess what targets and mechanisms are truly effective from the point of view of those companies that will be taking the risk and delivering the projects.

While the CEC welcomes the release of the Draft Guidelines we also have reservations about the objectives under which the Draft Guidelines have been formulated with regards to the connection of new non-registered and micro-embedded generation.

As the AER is aware the Ministerial Council on Energy's (now the Standing Council on Energy and Resources, SCER) consultation period for the forthcoming Chapter 5A of the National Electricity Rules was completed in February 2010. Over the 18 month period after this date (to August 2011) approximately 600MW of solar photovoltaic (PV) generation was connected to distribution networks across the country[1].

Although the majority of this new generation was subject to some form of financial assistance from external government policies the sheer magnitude of capacity demonstrates that business cases for solar PV and other forms of non-registered and micro-embedded generation are rapidly emerging.

Industry experience gained since February 2010 has identified a number of barriers to the introduction of non-registered embedded generation in the National Electricity Market (NEM). The CEC has significant concerns that lessons learned about these barriers were not captured in the development of Chapter 5A, and subsequently are not captured in the AER's Draft Guidelines.

In particular the CEC submits the following in relation to specific matters in the Draft Guideline.

[1] Clean Energy Council, 2011, *Clean Energy Australia Report 2011*, available: www.cleanenergycouncil.org.au

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Clauses 1.1.4 & 5.2.1

It is reasonable for the DNSP to calculate a charge for a connection based on the least cost means of meeting the required technical requirements. However, the Draft Guideline does require that the distribution network service provider provide sufficient opportunity for the connection applicant to consider non-network solutions or options which may be available to meet the same technical requirements.

DNSPs have historically shown a tendency to prefer well understood and practiced solutions over those that innovate. As the relevant legislative instruments do not clearly identify a need for innovative solutions fundamental design characteristics of distribution networks have remained unchanged for some time[2]. We believe that innovative solutions will be fundamental to the efficient development of distribution networks in the future and should be accessible through the relevant legislation - including the connection charge policies, as determined by the AER's Guidelines. Such an opportunity would be created by providing connection applicants with an explanation of the requirements of the connection, and any issues identified such that the applicant has the opportunity to consider the requirements of the connection further, agree with the proposed costs or develop customer-side solutions.

The following should be inserted as Clause 1.1.4 c. and 5.2.1 c.:

"*fully inform the connection applicant of the physical requirements of the connection and any issues identified, and the scope of work on which the total charge is based as needed to meet the acceptable technical standards.*"

Clause 3

Clause 3 correctly treats the costs for negotiated connections as being determined by the connection applicant and the distribution network service provider, as expected. However, experience has shown that the Chapter 5A frameworks under which negotiated connections are undertaken are flawed.

Clause 5A.C.3(a)(1) specifically relates to both parties undertaking negotiations in good faith. However, the application of this legal principal as it relates to generator connections under the current jurisdictional-level frameworks is that it can *only* be applied to the extent that the negotiation framework provides an unambiguously level playing field. In situations where the framework provides for one sided terms, these terms allow good faith to be interpreted as protecting the interests of the party represented by them.

One example of the above can be found in the requirement for distribution network service providers to provide connection cost estimates to the connection applicant (Clause 5A.C.3(3)). However, the same clause, and the associated clause 5A.E.2, does not require the distribution network service provider to provide detailed cost breakdowns to the extent that the connection applicant can assess the implications of the costs and negotiate on an informed basis. As the process *is not transparent* the intention of the good faith principal is lost.

[2] This is demonstrated by the fact that many of the NEM's distribution network service providers apply voltage control design principals to their networks that were documented by the State Electricity Commission of Victoria in the mid 1950's.

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We recognise that this is not a matter for the AER to consider. However, we argue that this failing of process has carried through to the Draft Guidelines and will result in ongoing disadvantage to the developers of non-market embedded generation projects.

Clause 5.2

As introduced in the AER's Consultation Paper to the Draft Guidelines a distinction has previously been made by the AER between deep and shallow network augmentation[3] whereby a deep augmentation is one to the shared network. We believe that a more appropriate definition for the connection of non-registered embedded generation is that used by the Essential Services Commission of Victoria in Guideline 15 for the connection of embedded generation[4] whereby a

> "*shallow augmentation in respect of embedded generation services, means the installation of connection assets and any augmentation of the distribution system up to and including the first transformation in the distribution system in respect of the embedded generator*",

and a

> "*deep augmentation in respect of embedded generation services, means any augmentation of the distribution system other than shallow augmentation in respect of the embedded generation services*".

The CEC is aware of a number of system issues currently faced by some distribution network service providers. In particular we refer to fault level issues in central business districts (CBD)[5]. Were a new customer or non-registered embedded generator applies to connect into a CBD network, there is a very high risk that the respective distribution network service provider will expect this applicant to provide funding to rectify fault level issues. It is well understood that such issues already exist in CBD networks[6].

Distribution network service providers are not obliged to disclose the extent of pre-existing network issues to connection applicants. Rather requests for such information will generally be met with refusal as it has the potential to debase their position. Thus, new CBD connections are inherently exposed to costs above those *required* for the connection. This risk should be managed through the appropriate legislative instruments.

At present there are significant barriers to the development of non-registered embedded generation in the NEM. Significant opportunities are also present for such generators to contribute to the management of peak demand and energy efficiency in CBD and other areas. We believe that including costs of augmentation of the wider distribution network into the works for connections will only enhance these barriers. The AER should be aware of this risk when finalising the Guideline.

[3] AER, 2011, *Issues and AER's preliminary positions, Connection charge guidelines: for accessing the electricity distribution network*.
[4] Essential Services Commission of Victoria, *Electricity Industry Guideline no. 15: Connection of Embedded Generation*, 2004, www.esc.vic.gov.au.
[5] Ibid.
[6] As demonstrated by the AER with regards to CitiPower, ibid.

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We suggest that the following be inserted into Clause 5.2.2:

"*For the purposes of this Clause 5.2.2 works elected by the distributions network service provider to a higher standard than that contemplated under Clause 5.2.1 include any augmentation works undertaken beyond the first transformation in the distribution system in respect of the connection applicant's connection point, unless negotiated otherwise under a negotiated connection offer.*"

Clause 5.2.3

The CEC expects that enhancing access by connection applicants to contestable services is an effective way to meet the national electricity objective. Clause 5.2.3 requires distribution network service providers to notify applicants of access to contestable processes in accordance with this understanding. However, we believe that this will be better facilitated by extending the scope of this notification process to ensure that the distribution network service provider provides sufficient information to permit applicants to easily access contestable processes.

We suggest that the following be inserted as Clause 5.2.3 c.:

"*If the connection applicant elects to run a tender process to procure connection services, where the distribution network service provider identifies that such services are available, the distribution network service provider shall, within 20 business days, provide all information required to enable the connection applicant to undertake the tender process in the same manner as the distribution network service provide would undertake this process.*"

Clause 7

Whilst we recognise that non-registered embedded generation can impose network requirements which differ to those of load, we question the intentions of this clause.

Firstly, the clause does not distinguish between deep and shallow augmentation works, nor is there a requirement for the distribution network service provider to fully disclose the extent of connection works, as discussed above. Clause 7.1.4 then allows the distribution network service provider to determine if there is a "net benefit to other network users". Hence, although the connection application is funding the connection, there is no requirement for the distribution network service provider to demonstrate to the connection applicant that there is *no net benefit to the other network users* when making this determination, nor is there a requirement to fully disclose what the connection applicant is paying for.

Thus non-registered embedded generators are exposed to the risk of funding distribution network upgrades which are not necessary to facilitate the required generation capacity, but can be used to enhance network's capability. We believe that the AER needs to consider this as a likely outcome when finalising the Guideline.

We suggest that the following should amend Clause 7.1.4:

"*Non-registered embedded generators should pay for the cost of removing specific network constraints where these constraints are required up to and including the first transformation in the distribution system in respect of the connection applicant's connection point, and where the distribution network service provider can demonstrate through technical analysis that the augmentation does not provide a net benefit to other network users*"

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Secondly, the CEC is surprised at the AER's attempt to transfer the charging approach used at the transmission level for market participant generators to non-registered embedded generation at the distribution level. The project economics and objectives are completely different for electricity customers who include embedded generation as they are for market generator developers, as demonstrated by the development of Chapter 5A. Hence the pricing structure under which non-market embedded generators invest in the network should also reflect this difference.

As discussed previously distribution networks need to evolve to accommodate future mixed demand, generation and storage functions. In practice distribution network service providers are best placed to accommodate innovative network designs as they have access to technical resources and accurate information on their networks. The AER should be looking for ways to incorporate such innovation into charging regimes. As such the AER should also explore alternative charging proposals for non-registered embedded generation such as a *regulated* unit rate charge for network access. Such alternative approaches could better provide the reform needed to create innovative solutions and develop future network configurations.

Once again the CEC thanks the AER for the opportunity to consider the Draft Guidelines and to prepare this submission. We look forward to working with the AER and the wider energy industry to ensure an effective outcome for clean energy technologies. Please do not hesitate to contact the undersigned for any queries on this submission.

Yours sincerely,

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