

2 April 2020

Mr John Pierce AO
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Electronic Submission – ERC0294

Consultation paper – Connection to dedicated connection assets

Dear Mr Pierce

Energy Networks Australia welcomes the opportunity to provide a response to the Australian Energy Market Commission’s (AEMC) Consultation Paper on Connection to dedicated connection assets (DCA).

Energy Networks Australia is the national industry body representing Australia’s electricity transmission and distribution and gas distribution networks. Our members provide more than 16 million electricity and gas connections to almost every home and business across Australia.

Energy Networks Australia is supportive of improvements to the framework to enable clear accountabilities, responsibilities on the shared transmission network and within the DCAs. In principle Energy Networks supports preserving the contestability regime for DCA and preserving the current access regime for DCAs with appropriate rules.

Energy Networks Australia has responded to the questions in the Attachment, in summary:

- » A DCA is not part of the Transmission Network and therefore defining the boundary between the Transmission Network and the DCA is of fundamental importance. The Transmission Connection and Planning Arrangements Rule change clarified the arrangements for DCAs, including the definition of (Transmission Network) Connection Point (TNCP), being the point at which flows to or from the person or identified user group connected to the transmission network can be isolated from the Transmission Network
- » Energy Networks Australia agrees that each DCA connection point (i.e. within the DCA either generator or load), should be registered in the National Electricity Market (NEM) for the purposes of settlements including having appropriate and consistent loss factors, have agreed generator technical performance standards and compliant metering;
- » Beyond the TNCP, the Dedicated Connection Asset Service Provider (DCASP) should be responsible for the negotiation of the connections of generators and loads to the DCAs, including performance standards etc with the involvement of

the Australian Energy Market Operator (AEMO) and the primary Transmission Network Service Provider (TNSP). This is analogous to the connection of registered generators and loads in a distribution network;

- » Energy Networks Australia considers that it is important to maintain a clear boundary between the shared transmission network and the DCA. It does not support the shared transmission network connection point being amended to be inside the DCA network, as Network Service Providers (NSPs) have obligations for performance and quality of supply under Schedule 5.1 on the Transmission Network;
- » The responsibilities and accountabilities of the primary TNSP and DCASP with respect to DCAs must be clarified;
- » A metering installation is still required at the TNCP to the DCA for the purposes of charging the DCASP Transmission Use of System (TUOS). Charging TUOS at the transmission network connection point is likely to encourage the coordination of loads and generators;
- » An effective framework must ensure that not only are parties connected to the DCA accountable for their individual performance standards but that the DCASP is also accountable for ensuring that the DCA is compliant with technical standards at its point of connection to the transmission network. The DCASP will still need a fit for purpose technical performance standard at the shared connection point with the TNSP, to meet the do no harm requirements and would be expected to remediate as necessary to ensure compliance;
- » AEMO could calculate Marginal Loss Factors (MLFs) to the respective DCA connection points within the DCA consistent with the approach for connection points directly connected on the shared network for the purposes of settlement;
- » Energy Networks Australia supports transitional arrangements that enable some flexibility for the parties involved;
- » If the AEMC aligned the small DCA arrangements to those for large DCAs then the provisions of National Electricity Rules (NER) S5.12 would be effective.
- » Any review of the DCA arrangements must address existing arrangements for third party Identified User Shared Asset (IUSAs) to ensure free loaders are not inappropriately rewarded.

Should you have any queries on this response please feel free to contact Verity Watson, vwatson@energynetworks.com.au.

Yours sincerely,



Andrew Dillon

Chief Executive Officer

Attachment – Response to Consultation Questions

Reference	Question	Energy Networks Australia response
1 CREATING INDIVIDUAL CONNECTION POINTS		
1.1	<p>Should each Registered Participant connected to a DCA be required to have an individual connection point? What would be the consequences of creating a transmission network connection point at the point where each participant’s facility connects to the DCA?</p>	<p>Energy Networks Australia agrees that each connection point within the DCA (generator or load) should be registered in the NEM for the purposes of settlements, agreed generator technical performance standard and compliant metering. The connection point on the shared transmission network remains an important shared transmission connection point where responsibilities change. Beyond the shared transmission network connection point, the DCASP is responsible for the DCAs and performance standards etc.</p> <p>The AEMO rule change proposal risks taking the shared transmission network to the DCA sub connection points. Energy Networks Australia do not support the proposed changes to the connection point and transmission connection point definitions. Rather a clearer framework similar to embedded networks with parent and child connection points needs to be considered akin to that used in the distribution network.</p> <p>The relationship and responsibilities of the DCASP and the primary TNSP must be clear. High level principles and obligations could be dealt with in regulation and reflected contractually in connection agreements.</p> <p>The DCASP must have clear responsibility for the performance standards of the DCA overall at the connection point on the shared transmission network. The DCASP needs to be accountable for compliance of the DCA overall, including meeting inertia, system strength requirements etc. As with the connection of registered generators and loads in the DCA network this must be done with the involvement of AEMO and the primary TNSP.</p>

1.2	Should the DCA connection point to the shared transmission network also continue to be a transmission network connection point or would this 'DCA connection point' need to be defined differently? If so, how?	<p>The Transmission Connection and Planning Arrangements Rule change clarified the arrangements for DCAs. Energy Networks Australia considers that it is still important to have a clear boundary between the shared transmission network and the DCA and does not support the shared transmission network connection point being amended to be inside the DCA network. The shared transmission network connection point to the DCA, or the DCASP, should remain on the shared transmission network, the sub connection points within the DCA are between load or generators and the DCASP. As noted in the response to Q 1.1, there needs to be additional clarity around the contractual arrangements on the shared network and also for the sub connection points within the DCA to ensure any new arrangements work in practice commercially not just from a NEM registration viewpoint.</p> <p>The AEMO proposal risks extending the shared transmission network into the DCA which would unwind the efficiency of the capacity sharing arrangements of Schedule 5.12 and potentially questions of economic regulation.</p> <p>Energy Networks Australia considers that it is impractical to refer the connection points within the DCA back to the shared transmission network connection points as some generator connections within the DCA may be close to the shared transmission network and others could be hundreds of kilometres away.</p>
1.3	Would a metering installation continue to be required at the DCA connection point? How should TUOS charges be levied for load customers connected to a DCA?	A metering installation is still required at the shared transmission network connection point to the DCA for the purposes of charging the DCASP TUOS. Charging TUOS at the transmission network connection point is likely to encourage the coordination of loads and generators.
2 NEGOTIATION AND ENFORCEMENT OF PERFORMANCE STANDARDS		
2.1	Do the current arrangements give rise to issues in terms of negotiating, monitoring and enforcing performance	Energy Networks Australia agrees there are issues with one DCASP having a singular generator technical performance standard at the shared transmission connection point established on behalf of many generators at sub connection points. Energy Networks

	<p>standards? What would be the costs of leaving the negotiation of NER responsibilities up to the contractual arrangements with other proponents/the DCASP compared to AEMO's proposed solution?</p>	<p>Australia does not support the DCA's being treated like shared transmission network, DCAs are not part of the open access regime.</p> <p>An effective framework must ensure that not only are parties connected to the DCA accountable for their individual performance standards but that the DCASP is also accountable for ensuring that the DCA is compliant with technical standards at its point of connection to the transmission network.</p> <p>The DCASP will still need a fit for purpose technical performance standard at the shared connection point with the TNSP to meet the do no harm requirements. As new parties connect over time within the DCA, there will be a need to revise the DCASP connection agreement and the over-arching technical performance standards at the shared transmission connection point.</p> <p>While primary TNSPs need to apply NER Chapter 5 for connection points on the shared transmission network it remains unclear whether the DCASP also have to apply Chapter 5 within the DCA.</p>
2.2	<p>If performance standards were to be negotiated at individual connection points to a DCA, should these be negotiated by the DCASP or the Primary TNSP? Would both NSPs need to be involved?</p>	<p>Both the TNSP and the DCASP need to be involved in the generator technical performance standards and the connection agreements within the DCA. While it is likely that the primary TNSP will be best placed to undertake the necessary studies, as with the connection of registered loads and generators in the distribution network the accountability should rest with the "host service provider" being the DCASP in this case.</p> <p>The DCASP may be best placed to allocate or share the performance standards to each connection points within the DCA. This may only be workable if the DCASP has the same obligations as the primary TNSP's but applied to the DCA. Extending the application of the existing Schedule 5.12 negotiating principles for Large DCA to small DCAs may facilitate this.</p>
2.3	<p>Which parties should have responsibilities for maintaining system strength?</p>	<p>As noted in Q2.2, it is unlikely that the DCASP will have the capability to undertake system strength assessments and may need to procure the primary TNSP to do these. The system strength requirements are measured at the shared transmission network</p>



		connection point. The DCASP may need to procure system strength services from the primary TNSP to ensure they meet the do no harm arrangements as new parties connect within the DCA.
2.4	Are there alternatives to AEMO's proposal, e.g. could the negotiation and enforcement of performance standards for parties connected to a DCA occur at a point other than a facility's connection point to the DCA?	Generator performance standards need to be maintained at the sub connection points within the DCA and the DCA must be compliant with an over-arching technical performance standard. The DCASP must be responsible for the blended version of the performance standards at the shared transmission connection points and compliance with the performance standards regardless of the combination of generators dispatching.
3 TRANSMISSION LOSSES		
3.1	Should MLFs for individual facilities in an identified user group connected to a DCA be calculated consistent with the rest of the NEM?	Transmission losses must be allocated at DCA sub connection points to facilitate settlement. Energy Networks Australia understands that AEMO recommends that these be calculated using the existing AEMO MLF methodology on the basis that this is consistent with the rest of the NEM. Average loss factors, analogues to a DLF could alternatively be used. There are advantages and disadvantages with selection of the most appropriate methodology that may advantage and/or disadvantage some connected parties. On balance, Energy Network's Australia considers that AEMO should calculate the MLFs to the respective connection points within the DCA consistent with the approach for connection points directly connected on the shared network.
3.2	Should the DCASP instead calculate average DCA loss factors for DCA connected proponents to reflect losses on the DCA? Are there any other alternatives to calculate transmission losses?	As noted above, conceptually the MLF/DLF (distribution loss factor) arrangements of distribution connected load and generators could be adopted if average losses are not supported. AEMO should calculate the MLFs to the respective connection points within the DCA consistent with the approach adopted in the NEM. In future it may mean that the MLFs are calculated as dynamic marginal loss factors.
4 ACCESS FRAMEWORK		

4.1	Should all DCAs be required to have an access policy?	As noted above there may be some benefits to Large DCA access policies applying to small DCAs. However, Energy Networks Australia understands that the 30km threshold was deliberately established in the TCAPA rule change process. Below 30km it was considered economic to establish a separate connection if reasonable terms and conditions could not be agreed with the small DCASP.
4.2	If not, what would be an appropriate threshold for the differentiation between DCAs that should have an access policy, and those that need not?	The AEMC established the 30km threshold based on it being a pragmatic threshold to reduce the likelihood of inefficient duplication, it may be appropriate for the AEMC to revisit the thinking in the TCAPA rules to assess whether this threshold needs changing.
4.3	Is there any merit to an approach that would limit DCA access to one proponent?	No. This may significantly erode one of the intended benefits of the DCA access framework which was to enable efficient use of scaled connection assets.
5 TRANSITIONAL PROVISIONS AND OTHER ISSUES		
5.1	Are AEMO's proposed transitional provisions appropriate? Would additional or alternative transitional provisions be required to address the issues identified in the rule change request?	<p>Energy Networks Australia support the following arrangements;</p> <ul style="list-style-type: none"> » Existing DCA's are grandfathered; » Existing DCA's can transition to some of the newer arrangements where all parties agree, e.g. if there is agreement to meter both at the shared network connection point and the sub connection points within the DCA; or » Existing DCA has new DCA connections which would require the connection agreement with the primary TNSP to be amended and bought in line with the new arrangements. <p>Energy Networks Australia notes that in NER Schedule 5.12, the next connection applicant may need to pay for large DCA services i.e. for the cost to upgrade or alter existing large</p>

		dedicated connection assets to enable their connection without adversely impacting the access of other parties within the DCA.
5.2	Are there any other issues that the Commission should consider in relation to the proposed rule change?	Nothing further to add.