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Dr John Tamblyn
Chairman
Australian Energy Market Commission
Level 16, 1 Margaret Street
Sydney NSW 2000

Dear Dr Tamblyn

Consultation Paper

National Electricity Amendment (Scale Efficient Network Extensions) Rule 2010

Thank you for the opportunity to comment on the Rule Change proposals put forward by the Ministerial Council on Energy (MCE) and released for consultation as the *National Electricity Amendment (*Scale Efficient Network Extensions*) Rule 2010*

CitiPower and Powercor Australia (Powercor) are Victorian electricity distributors who are registered by AEMO as Network Service Providers and will be directly affected by the outcomes arising from this proposal.

CitiPower and Powercor support initiatives to facilitate the connection of generation. However, there are a number of concerns about the details of the proposal which are raised for your consideration.

- The proposed SENE arrangements are complicated and potentially onerous on DNSP's with each SENE effectively becoming a separate regulated business with cost pass through but without the usual incentive properties that would normally apply under a price cap framework.
- CitiPower and Powercor believe that SENE assets should be included in the DNSP's regulated asset base and covered by the existing regulatory framework as far as possible.

- The proposal is focused on providing an asset dedicated to the connection of generation. This is likely to be impractical and inefficient in a distribution network. It is essential that SENE's can be incorporated into the shared network, or planned in conjunction with shared network augmentation because connection of load close to generation is the optimum solution and minimises energy losses. This is particularly important for Distribution SENE's because these are likely to be used in the short to medium term to provide new load connections or augment the shared distribution system. Allowing for integration of SENE's into the shared network may also provides the opportunity to improve reliability and security of supply to parts of the shared network that would not otherwise be economical without the SENE's contribution toward costs. Ring fencing a SENE could result in very inefficient duplication of assets to separately serve load and generation requirements.
- The probability of integration of the SENE and the shared network also raises questions about the treatment of the SENE as a negotiated distribution service in the first instance. It may be more appropriate to classify the SENE as a direct control service.
- The compensation arrangements proposed for circumstances where generators are constrained off by the operation of another generator connected to the SENE are onerous and require market information not accessed by NSP's. If such compensation is retained, consideration should be given to whether or not it would be more appropriate for AEMO to manage the compensation arrangements. Alternatively, could the need for compensation as proposed by clause 5.5A14 be avoided if the generators capacity rights were considered in the dispatch instructions?

To ensure that an effective rule change is developed, the AEMC should consider further stakeholder workshops, particularly focussed on the issues identified by CitiPower and Powercor, regarding SENE's in distribution networks.

More detailed comments and drafting issues are set out in the attachment.

Please do not hesitate to give me a call on (03) 9683 42982 or email to rherrmann@powercor.com.au if you require any further information in relation to this matter.

Yours sincerely

Rolf Herrmann
Manager Regulation

Questions/Issue	CitiPower and Powercor Comment
Question 1 Will the proposed framework improve efficiency in the construction of connection assets? **1.1 Under the existing Rules, are inefficiencies likely to arise as a result of the significant new investment in renewable generation?** **1.2 If so, do the costs associated with these inefficiencies justify amendments to the Rules?** **1.3 Do you agree that the proposed Rule change will lessen the risk of the inefficient duplication of assets?**	CitiPower and Powercor agree that the proposed framework has potential to improve the efficiency of providing assets to connect remote generation. The proposed SENE arrangements are complicated and potentially onerous on DNSP's with each SENE effectively a separate regulated business with cost pass through but without the usual incentive properties that would normally apply under a price cap. CitiPower and Powercor believe that SENE assets should be included in the DNSP's regulated asset base and covered by the existing regulatory framework as far as possible. The proposal contemplates uniform charges for Generators. It may be worth considering if this should be expanded to provide for generators to pay for the use of the distribution system in the form of a tariff, then a much simpler scheme to facilitate the connection of embedded generators may be possible on a connection charging basis more comparable to the connection of customer loads.
Question 2 Will SENEs be efficiently sized and located so as to minimise risk to consumers? **2.1 Are NSPs likely to construct SENEs that are efficiently sized and located? Is there a significant risk of over-investment?** **2.2 Are the risks associated with asset stranding outweighed by the potential efficiency gains from efficiently sized network extensions?** **2.3 Does the Rule change, as proposed, provide sufficient checks and balances to minimise risks to consumers?**	The sizing of the SENEs will be based on forecasts that are inherently uncertain. There is a risk of over-investment resulting in unused capacity, there is also the risk of under investment that will require subsequent early investment to augment the SENE reducing the scale economies that are the target of the Rule Change. The Governance structure and sound assessment should effectively manage this risk. The risk of over investment could be further managed by providing a capacity based threshold for the initial committed connections which triggers the construction of the SENE to ensure that a significant proportion of the capacity to be made available is committed before construction.

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Question 3 Are alternative risk mitigation measures more appropriate? **3.1 Who benefits from SENEs and who is best placed to manage the risk of asset stranding?** **3.2 Should the framework include a more explicit economic efficiency test? If so, what form might it take?** **3.3 Would a market-based approach to the sizing and location of SENEs be more appropriate? If so, what form might it take?**	Customers benefit from the SENE as it provides for more efficient network investment. The risk of stranded assets could be reduced by providing a capacity based threshold for the initial committed connections which triggers the construction of the SENE to ensure that a significant proportion of the capacity to be made available is committed before construction as discussed under Q2 above. A more market based approach to the sizing and location of SENE's is not likely to result in better outcomes because it is unlikely that all the potential generators connecting in an area would be in a position to commit at the same time.
Question 4 Will generators be able to connect to the SENEs in the most efficient configuration? **4.1 Should the draft Rule allow for configurations other than a "hub and spoke"?** **4.2 If so, how could the charging arrangements best promote efficient locational decisions by generators and by NSPs in locating SENEs?** **4.3 Should the costs of the SENE be spread across all generators irrespective of where they locate?**	Options for alternative configurations which are more effective in the circumstances are certain to present themselves and arrangements need to be flexible to accommodate these variations. The Rule should not specify the configuration. The location of the SENE is necessarily based on information about generation capacity ready to commit to connection and a series of forecast assumptions about the location and size of future generators. This is as efficient as it can be in the absence of waiting for the SENE to be fully subscribed before final design. The locational decisions by generators are likely to be influenced by many considerations. One of those considerations is the cost of the dedicated connection assets which provides an effective cost reflective locational signal Spreading the SENE cost across all generators would dilute, or remove, the incentive for generators to take into account the location of the connection point and is therefore likely to reduce the economic efficiency of the proposal.
Question 5 Will capacity be efficiently allocated to connecting generators? **5.1 Will the framework promote the efficient allocation of capacity on the SENE?** **5.2 More generally, will the SENEs framework result in efficient outcomes in the wholesale market?**	The SENE's capacity to export power is likely to depend on other elements of the network and dispatch of other generators making the capacity rights and compensation arrangements difficult to administer. It is also not clear how these arrangements are intended to work when the SENE's capacity is constrained below its normal capacity, unless the capacity rights of all generators are reduced in proportion during the constraint. The compensation arrangements proposed will also require AEMO to develop constraint

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5.3 Could an interruptible generator connect to the SENE? If so, what arrangements would need to be in place to ensure the full cost of the SENE can be recovered?	equations for the distribution system when a distribution SENE is developed. The compensation calculations set out in clause 5.5A14 requires market information not normally processed by NSP's. The AEMC should consider whether or not it would be more appropriate for AEMO to manage the compensation arrangements. Could the need for compensation as proposed by clause 5.5A14 be avoided if the generators capacity rights were considered in the dispatch instructions? Allowing connection of interruptible generation would be efficient to maximise the utilisation of the SENE. However, it should not be permitted unless the SENE is fully, or at least substantially, subscribed or the customers will be required to underwrite the generators using SENE capacity without contributing to its costs.
Question 6 How could loops to the shared network and load connections to SENEs best be accommodated? **6.1 Should SENEs be "ring fenced" from the shared network to enable the framework to operate? If so, should a time limit apply to such ring fencing arrangements?** **6.2 Alternatively, how could SENEs best be incorporated into the shared network? In particular, how could the challenges arising from capacity rights to the former SENE best be addressed?**	It is essential that SENE's can be incorporated into the shared network, or planned in conjunction with shared network augmentation because connection of load close to generation is the optimum solution and minimises energy losses. This is particularly important for Distribution SENE's because these are likely to be used in the short to medium term to provide new load connections or augment the shared distribution system. Ring fencing a SENE could result in very inefficient duplication of assets to separately serve load and generation requirements. Allowing for integration of SENE's into the shared network may also provides the opportunity to improve reliability and security of supply to parts of the shared network that would not otherwise be economical without the SENE's contribution toward costs. Integration of SENE's and shared networks would require an allocation of costs between the SENE and the shared network. It may be necessary to develop principles in the Rules to ensure this is equitably achieved. The probability of integration of the SENE and the shared network also raises questions about the treatment of the SENE as a negotiated distribution service in the first instance. It may be more appropriate to classify the SENE as a direct control service.

Clause	Drafting Comments
Clause 5.5A.15	Customers within a region underwrite the revenue shortfall for a SENE which is not fully subscribed. Any shortfall is recovered through an allocation methodology by the Co-ordinating SENE Network Service Provider, presumably through an uplift on transmission charges. However the Rules drafting provided is unclear in this respect as it provides for a SENE provider, which may be a DNSP, to prepare its "pricing methodology" which is a defined term applicable to transmission pricing only and does not include distribution pricing. In other words, it is not clear how a DNSP SENE provider will be able to recover costs from customers. Also, whilst the Co-ordinating SENE Network Service Provider is responsible for the allocation of costs, based on information provided by the appointing SENE providers, it is unclear how the actual cash transactions will occur.
Clause 5.5A13	Clause 5.5A13 provides for a SENE charge to be calculated on a $/MW basis. CitiPower and Powercor believe it would be more cost reflective for this charge to be calculated on a $/MVA basis
Clause 5.5A.15(d)	Clause 5.5A.15 (d) refers to the Co-ordinating SENE Network Service Provider making allocation in accordance with its "pricing methodology" which is a defined term with application only to Transmission Network Service Providers. This infers a constraint on the appointment of the Co-ordinating SENE Network Service Provider to be a Transmission Network Service Provider which is not evident in clause 5.5A.15 (a) where the appointing SENE providers must appoint a Co-ordinating SENE Network Service Provider which could otherwise be a Distribution Network Service provider.
Clause 5.6A.2(c)(8a)	The proposed new clause 5.6A.2(c)(8a) seems to largely duplicate the identification of scale efficient generation zones and Network Service Providers responsible for preparing options provided in 5.6A.2(c)(2a) and (2b). It does introduce the requirement to identify the location of any identified scale efficient generation zone, however, the requirement to identify scale efficient generation zones would not be complete without the location being specified.
Clause 5.5A.13	In clause 5.5A.13, on several occasions, the words "economic life" are italicised indicating a defined term. This term is not currently defined in the NER and none is proposed under this rule change.
Clause 5.5A.5(c)(2)	Clause 5.5A.5(c)(2) requires the design of the SENE to be optimised to minimise the present value of the connection costs. This presumably intends the inclusion of all costs, including the SENE and the generators dedicated connection assets.

	This should be made clear to ensure that “connection” costs are not minimised at the expense of increasing SENE costs.
Clause 5.5A.12	Clause 5.5A.12 refers to “pass through to customers”. It is assumed that this is not a reference to the cost pass through mechanism provided under clause 6.6 of the NER and that the pass through for SENE costs is not subject to a materiality threshold. It may be less confusing to avoid the use of the words “cost pass through”.