

Friday, 1 July 2016

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

Dear Mr Pierce,

**RE: ERC0192 Transmission Connection and Planning Arrangements Rule Change, Discussion Paper Submission**

The Clean Energy Council (CEC) works with Australian renewable energy businesses across all technologies to accelerate the transformation of Australia's energy system into a clean energy system.

As expressed previously the CEC generally supports the objectives of this rule change. Moves to clarify the rules are a welcome advancement for CEC members. As are the clarification of assets, the introduction of a refined negotiating rules and an independent third-party view on disagreeable matters.


Competition has been delivering connections in Victoria, demonstrating that the wider market is ready for the changes promoted in this rule change. While CEC members support the increased competition promoted by Option B described in the rule change, concerns have been raised about the viability of this given the restrictions placed on the incumbent transmission businesses.

Although complex, this increased competition option is heading in the right direction. Members of the CEC have raised concerns about unintended consequences that could undermine the benefits of the more competitive model. These are documented in this submission and need to be worked through.

Finally, under the legislated Renewable Energy Target thirty to fifty large scale generators will be seeking to connect to the transmission system in the NEM by 2020. These projects will be looking to access the opportunities created by this rule change and its development and implementation should be expedited to ensure these efficiencies can be delivered.

The remainder of this submission provides the CEC's detailed responses to Commission's questions in relation to connections. Please contact the undersigned for any queries regarding this submission.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tom Butler', with a long horizontal stroke extending to the right.

Tom Butler

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## 1. Rule change objectives and other matters

The commission has summarised the objectives of this rule change as:

1. *“to improve outcomes for connecting parties with regard to the transparency, timeliness, cost and complexity of connections to the transmission network; while*
2. *maintaining clear accountability for the safe, reliable and secure supply of electricity across the shared transmission network”<sup>1</sup>*

The CEC agrees that clarifying the relevant parts of the NER and enhancing negotiating frameworks as proposed will make a notable contribution to the first objective. The proposed introduction of contestability would also contribute. However there is a need to ensure that competition is not overburdened by complexity as this could seriously challenge the success of this rule change.

### Future application to distribution networks

The CEC recognises that recent changes have been made to the connection of embedded generation in Chapter 5 of the NER. These changes focussed on prescription of the process, not contestability. The CEC believes that all applicable aspects of this rule change should also be applied to connections to distribution networks, especially in regards to the ‘sub-transmission’ network.

### Interface with “*Scale Efficient Network Extensions*”

Identified User Shared Network Assets could ultimately facilitate a shared connection between two parties that would, for all intended purposes, look the same under the rules as a Scale Efficient Network Extension (SENE) created under NER cl. 5.19. Although not considered explicitly to date in this rule change the CEC requests that the Commission review the SENE rules to ensure that their scope and application are consistent with the revised rules.

For example, is a SENE intended to apply to a shared Dedicated Connection Asset, or only to the transmission network? Why would the local TNSP remain the focus of a SENE study in a competitive environment? How would the competitive model be incorporated into the SENE rules?

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<sup>1</sup> Discussion paper, page 7.

## 2. Proposed changes to the NER transmission connection framework

Negotiated services remain a strong element of the Commission's proposed connections and contestability arrangements to varying degrees.

The efficiency of the NER's negotiate/arbitrate arrangements is dependent on open information exchange to enable negotiation from the outset. The CEC accepts that the extent of the information required to be published would depend on the competitive model adopted. However, because negotiated services are dependent on information exchange requirements to publish information relevant to the extent of negotiated services remains appropriate.

On this basis the CEC supports the increased transparency requirements and the proposed implementation as set out by the Commission.

The proposed asset and user definitions are required to the extent that they create a fundamental division between elements that are negotiable and those that are intended to be contestable. This should clarify transmission connections for all parties. We question the need to define an 'Identified User Group' however. This seems to simply be a new definition for a generator or load that would be seeking connection. Its purpose otherwise is not clear.

### Reviewing the negotiating principles

The CEC principally supports changes that encourage a more flexible and adaptive electricity market. Embedding negotiating rules into the NER as proposed would enable this by removing up to 5-years of transmission determination lag time between a rule determination and updates to the current negotiating principles.

The Commission's clarification that the negotiating rules would not apply in relation to Dedicated Connection Assets (which would be competitively provided) is a welcome acknowledgement of the concerns the CEC raised in our previous submission. This removes a potentially significant source of ambiguity from the rule change.

The CEC expects the objectives (as below) and proposed negotiating rules would create a negotiating framework that better fits all matters that are negotiated, and a NEM-wide approach will remove some doubt for those generators looking to invest in a NEM region where they may not be experienced.

*"The negotiation rules would have three main objectives:*

- *To require the incumbent TNSP and the connecting party to negotiate in good faith to agree the price, standard, conditions and timing of services to be provided.*

- *To improve the transparency of the negotiation process to enable both parties to understand each other's decisions and requirements.*
- *To better link the connection process requirements set out in Chapter 5 of the NER with the negotiation process as set out in Chapter 6A of the NER.<sup>2</sup>*

CEC members have expressed concern about the scope for TNSPs to request investments that do not appear reasonable as compared to experience with other connections. A clear rules objective to minimise the reasonable costs to the connecting party, or avoid undue costs of expansion (as proposed by the Commission<sup>3</sup>), would assist. This could also provide a basis for an independent engineer or arbitrator to make a decision on a disputed matter.

Termination clauses should be clarified to ensure scope of subjectivity is minimised. For example, whether or not a generator is negotiating 'in good faith' is open to interpretation. The TNSP may simply not have the generator's agreement over a matter and refuse to negotiate. In addition the CEC would expect that a decision to terminate negotiations on the basis of 'good faith' would need to be supported by some form of reporting or AER approval.

Consider the scenario where two competing connections are looking to build Identified User Shared Assets close to each other, but only one proponent has selected to use the incumbent TNSP (or its affiliate) for the capital works. The incumbent would have incentive to delay, or terminate negotiations with the proponent that did not select it for construction as it could seek to derive additional income if this proponent from connecting to the User Shared Assets it constructed at a later date. It could delay this proponent by making unreasonable requests for information, then terminate negotiations on the basis of failing to negotiate in good faith if the generator fails to comply. This risk would need to be managed through appropriate reporting requirements if termination is invoked by a TNSP.

In summary the presence of a clause to terminate on the grounds of 'good faith' introduces subjectivity that could be used to manipulate an outcome. The Commission should provide some guidance on the need for this clause, given the other termination rules provide sufficient scope for termination.

### **Introducing an independent engineering expert to support dispute resolution**

As previously noted the CEC supports moves to clarify dispute resolution procedures. Increasing the complexity of connections by introducing new parties and additional commercial pressures increases the need for expeditious and binding decisions to be made over disputes if needed. Although the proposed clarification to dispute resolution is an

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<sup>2</sup> Discussion Paper, page 25.

<sup>3</sup> Discussion Paper, page 26.

incremental change, the introduction of an independent engineering view is a welcome advancement.

The CEC maintains that allowing international expertise to be listed on the panel will be an important contribution to ensuring an independent view can be found. In addition, there is a risk that local consultancies may not wish to be listed if their decisions impede future prospects. Alternatively, given the relatively small market in Australia panel members could very easily be conflicted due to other contracts with either party. Allowing international expertise to be listed could overcome these issues. Given that the parties are to agree on the selected expert the listing of overseas engineers would not introduce new risks. It is also worth noting that these matters are good reasons to require the parties to explain why they cannot agree on an engineer to the AER, such that the AER can make an informed choice for the parties.

The ability to bring a third party into the negotiations to provide advice on technical matters (along with the proposed costs structures) would create some pressure on both parties to be fair and reasonable. A factor that requires further consideration is the need to ensure the parties are open and transparent with the independent engineer if one is called upon. For example modelling undertaken by a TNSP may need to be disclosed to the engineer, or alternatively a generator's intellectual property may need to be disclosed. The NER would need to ensure that confidentiality of each party's information is retained.

In addition, there may be benefits to providing structure to the independent engineer's report. For example this could include:

1. Summary of the issue under question.
2. Summary of the potential solutions to the issue.
3. Risks and costs to each party from the options available to resolve the issue.
4. Assessment of compliance of solutions against the NER.
5. Assessment of compliance of solutions against other standards or guidelines.
6. Engineer's preferred solution.
7. Reasons for engineers preferred solution.

The CEC expects that there are benefits to defining a report structure. For example consistency in reporting will further assist an expeditious resolution over disputes. It would also reduce the need to negotiate around what should be investigated by the independent engineer, making their services easier to access given the parties are already in disagreement. To clarify, the intent of this structure is not to predicate the scope of work but to place some boundaries around the scope and set expectations to better enable the appointment of an engineer.

### 3. Dedicated connection assets

As previously noted the CEC generally agrees with the proposed approach to clarify that these assets are fully contestable in the NER. Investments in these assets will remain efficient if the party who benefits from them has control over their design, construction, ownership and operation. Clarifying the NER as proposed is an improvement as this should remove the risk of incorrect interpretation of the rules, or the prevention of competitive outcomes delivering lowest cost electricity to consumers.

#### Registration requirements

The expectations AEMO places on a generator to manage power system security are already captured in generator connection agreements which generally also account for the Dedicated Connection Asset. However, this may become less certain in scenarios where the assets are owned by a different entity so a light-handed registration approach that can be executed alongside generator registration is appropriate.

The proposed conditions for registration should be clear that the negotiate/arbitrate framework is limited to the principles for third party access. In addition, there is a need to clarify that the owners of these assets would be reliant on the principles and not be subject to structural separation or the AER's ring-fencing guidelines. If they were subject to these criteria the NER would create unnecessary restrictions on ownership that are contrary to the the 'limbs' that define this asset.

#### Third party access

Although there may be situations where a third party may seek access there has been no evidence provided to suggest that this is not possible or occurring inefficiently under current arrangements. On this basis the CEC expects that third-party access terms should reflect outcomes that are expected from a commercial negotiation.

As previously noted Dedicated Connection Assets constructed by a generator are done so on a 'right-sized' basis that ensures the correct balance of capital expenditure and operating costs for the connecting party, which may include current and planned future operations. As a result any new generator connection to these assets would almost certainly require significant augmentation of the asset.

The Commission's proposed principles for third party access include that

- *“access should only be offered if the asset has spare capacity, or the new connecting party funds any upgrade that facilitates unconstrained operation of the asset; and*

- *access should only be provided if the existing connecting party's business interests would not be materially disadvantaged. Business interests excludes limiting or minimising competition from new entrants*<sup>4</sup>

The CEC's view is that these principles provide sufficient prescription to avoid ambiguity while ensuring the incumbent owner is not disadvantaged and investments remain predictable and therefore efficient. These principles should be embedded into the terms of registration (an additional principle is noted below).

As previously noted the proposed treatment of the Dedicated Connection Assets and third party access need to consider the location of generator connection and metering points, along with the economic impact that may result from changes to these points. Because there are currently a variety of different interpretations and application of these definitions across the NEM it is appropriate that the third party access principles ensure compensation for impacts on prospective revenue. In addition outages of these assets during construction to connect the third party would lead to a loss of revenue for the incumbent owner. On this basis an additional term should be considered to make sure expectations are clear:

- access should only be offered if the connecting party compensates the initial party for the impact their connection has on revenues during construction and operation of the generator.

### **Transition to the shared network**

The CEC maintains the view that any transition to the shared network should be undertaken on a commercial basis. The connections frameworks need to ensure transparency and predictability, given that these assets were financed on commercial terms re-purchases should also be made on commercial terms.

As previously noted, any transition of these assets also calls for flexibility in the negotiations. Allowing commercial negotiations to prevail on a case-by-case basis where such a transition is identified as the lowest cost option for consumers is a reasonable approach. Placing limited provisions to guide a fair-priced transition supported by dispute resolution is also appropriate. These matters should be embedded into the terms of registration.

The Commission should give further thought to timing and when the DNSP or TNSP must advise the asset owner that their Dedicated Connection Asset is a potential alternative to shared network augmentation. The CEC's view is that this needs to be done as early as possible, prior to any detailed investigation of the option.

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<sup>4</sup> Discussion paper, p 36.



## 4. Identified user shared assets and contestability

The benefits of increased contestability is already being realised in Victoria where recent connections have made significant savings on the construction of shared network assets. The CEC believes that these outcomes can also be achieved with competition in other parts of the NEM. As a result we remain of the view that competition should be maximised to the greatest extent practicable, so supports Option B on principle.

However, CEC members have raised three concerns with the proposed Option B that may undermine its success:

- 1) The contracts needed to support the 'constrained' full contestability Option B would be complex to the extent that it may create more time and cost to the process for incremental gain above Option A.
- 2) On both options the incumbent TNSP will be required to process and agree to a connection agreement with the connecting generator. There is a risk that, where a TNSP loses a commercial bid and the subsequent revenue it may not act cooperatively to secure a connection agreement with the relevant party. This risk increases with Option B. Further investigation is needed to identify if this can be managed through new rules setting out timeframes and milestones that the incumbent TNSP must adhere to.
- 3) The limitations of Option B that place responsibility for shared network outcomes with the incumbent TNSP have the potential to significantly undermine the benefits of this model. Such a requirement would add additional requirements well above that expected by the functional specification (operation for example). These additional requirements may create assets that functionally 'look' the same as in Option A, adding cost and complexity that undermines the incremental benefits of Option B.

### Boundaries of contestability

The CEC appreciates that the Commission has proposed two discrete contestability models. However the CEC understands that the final rules would not prevent a continuum of contestable outcomes. This is illustrated in Table 1 assuming that Option B is taken forward.

Table 1: Continuum of contestable outcomes (TNSP selected = red; competitive provider selected = green; negotiated service = orange; \* = subject to the limitations set out by the Commission).

Option	TNSP	A-	A'	B-	B
Functional Specification	Orange	Orange	Orange	Orange	Orange
High level design	Red	Red	Red	Red	Green
Construction	Red	Green	Green	Green*	Green*
Ownership	Red	Red	Green*	Green*	Green*
Operation & maintenance	Red	Red	Red	Green*	Green*
Cut-in works	Orange	Orange	Orange	Orange	Orange

Table 1 captures the importance of the options that allow the generator to access the acceptable level of competitive services. For example, the limitations placed on Option B mean that the incremental benefits of obtaining a competitive high level design may be diminished. The owner of the assets may simply prefer to go to the incumbent TNSP for this service. Option B- may be the more efficient outcome and the rules should not prevent this.

Similarly, the TNSP may be comfortable with owning the assets, given construction would be to their design and they would be operating and maintaining them. Option A' is a more competitive version of Option A. However, there may be instances where Option A- produces the most efficient outcome. This too should not be prevented by the rules. Of course the option to use the TNSP (or its affiliate) for all works would also exist.

Permitting this range of competitive options would allow the market to determine the most efficient outcome, noting that this could also evolve with experience.

### Ownership

The CEC notes that concerns about potential insolvency of an owner of these assets may not be material. Should this occur the assets would likely be subject to administrator sale and subsequently purchased at a reduced price in the competitive market. Similarly, responsibilities in the case of insolvency would be allocated in the contract with the incumbent TNSP. There does not appear to be a clear reason why this scenario should be a significant concern.

## Registration

Given the continuum of options set out above the CEC agrees with the need to register the owner of these assets with a restricted TNSP registration, given that these assets form part of the shared network.

## Third party access

Given the registration requirements for TNSPs or the owner of the Identified User Shared Asset the CEC does not envisage any new challenges. The proposed principles for third party access create the adequate level of certainty for owners of these assets and the generators making the investment.

## Asset sizing

The CEC supports the Commission's intent to ensure that asset sizes are efficient for the needs of the connecting party making the investment, including making investments for future operations. These parties should not be burdened with costs for over-scaling these assets to allow for competing future connections or face the risk of a second mover utilising Identified User Shared Assets that the first mover had invested in to accommodate future operations.

## Contractual arrangements

The contracts needed to support Option B would likely include:

- A connection agreement between the connecting party and the incumbent TNSP;
- A Identified User Shared Asset agreement between the connecting party and the asset owner; and
- A connection agreement between the owner of the Identified User Shared Asset and the incumbent TNSP.

While not as complex as the Victorian model (where AEMO is the TNSP) this approach is still quite complex. The main difference between Options A and B would be additional terms that the incumbent TNSP might require to provide confidence that they can remain accountable for parts of the shared network that they may not own, control, operate or maintain (namely the Identified User Shared Assets). While this additional complexity may create more time and cost to the process for incremental gain above Option A experience with the Victorian model already shows that, while not ideal, these complexities can be worked through with experience in a competitive environment.

The CEC agrees with the Commission that including the terms for Option B in connection agreements would be extensive and place unnecessary pressure on these agreements. However, the connection agreement and the asset owner's agreement with the incumbent

TNSP are separate negotiations in the Commission's Option B. Also, generators would be structurally separated from owning Identified User Shared Assets so this does not appear to be a material problem.

### **The connection process**

The CEC understands that connection processes would not differ substantially from current processes. However, the expectation is that the process would permit the competitive market to shape the extent of competition in accordance with the continuum of outcomes.

The CEC understands that the objective of this rule change is to create efficiencies in connection process outcomes by increasing transparency and contestability. The theory being that the commercial pressures on the incumbent TNSP would drive performance in connection processes. This could very easily work in reverse.

In both options the incumbent TNSP will be required to process and agree to a connection agreement with the connecting generator. There is a risk that, where a TNSP loses a competitive bid it may not act cooperatively to secure a connection agreement with the connecting party. This risk increases with Option B.

It is likely that this risk can be managed new rules setting out timeframes and milestones that the incumbent TNSP must adhere to and this should be explored to support Option B.

## **5. Arrangements for Victoria**

The CEC supports increased consistency across the market. The outcomes of this rule change should apply to the Victorian market to the extent practicable.