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Dear Suzanne

Transmission Connections and Planning Rule Change Proposal - Discussion Paper

AEMO welcomes the opportunity to provide feedback on the Commission's discussion paper. We take a strong interest in the proposed reforms as they have the potential to transform the direction and nature of the transmission connection process. We are pleased that the Commission has listened to stakeholders' views and sought to develop a model that increases contestability for the provision of connection and related shared network services.

The current connections model in Victoria has demonstrated that competition in this space is workable. This is not to say that it doesn't present TNSPs and connection applicants with challenges, but these are diminishing as AEMO, TNSPs and connection applicants become more familiar with the unique process and as we implement improvements. At this stage, the extent to which the proposed rule change applies to Victoria in unclear. We perceive our role as to impart relevant information on our experiences with contestability. Consequently this submission sets out AEMO's views on the key features of the proposed Model B.[1]

Model B is a welcome step forward, however we consider that the there is scope to improve the model to provides a stronger foundation for a contestable connections market. In particular, the level of risk attributed to the incumbent TNSP under Model B is likely to prompt TNSPs to behave in a fashion that undermines the potential benefits of contestability.

1. Accountability under a contestable framework

Accountability should be thought of in two domains. The first is accountability that is bestowed by ownership and/or control of the service bearing assets. This is a relatively straightforward concept that posits that the best party to take accountability for the operation and performance of assets is the owner/controller of those assets. We believe that this principle is already established under the current National Electricity Rules (Rules).

The second is how those assets interact with the rest of the network. The owner and controller of contestable assets is not necessarily the best party to prescribe the safest and most secure and reliable method to integrate (i.e. communicate and coordinate) with the rest of the network. These aspects of the connection may require a greater level of documentation or co-operation. To this end, the Rules should set out the terms on which contestable and incumbent TNSPs co-ordinate and co-operate with each other such that overall system performance is not compromised.

[1] Our views on Model A are set out in our previous submission.

For instance:

- Protection and control equipment would need to be able to communicate with each other within set timeframes and
- Relays would need to be able to work with each other.

From a system security point of view, AEMO is accustomed to working with multiple TNSPs within a region as we already do this in both New South Wales and Victoria. These circumstances are dealt with via Rule 4.10, which requires AEMO to issue power system operating procedures which TNSPs (and others) must comply with. Further, the Rules already include provisions that allocate responsibilities between adjacent TNSPs, generators, customers and AEMO – for instance Rule 5.7.7, which relates to inter-network power system tests. This template approach could be applied more broadly to clearly define actions that must be completed and the accountable parties.

The discussion paper suggests that AEMO is "ultimately accountable for the declared shared network in Victoria" (pg 10). In practice, TNSPs own assets and physically provide a service, whereas AEMO is responsible for the system security and reliability of the network. Any entity that provides transmission shared network and connection services must be a registered TNSP and satisfy any jurisdictional licensing requirements. The Rules allocate responsibility for complying with various obligations between AEMO and the transmission network businesses.[2]

The Victorian arrangements demonstrate that competition can succeed and that contracts can solve accountability requirements without compromising system security, reliability or impeding future third party access.

However, we acknowledge that the contractual negotiation process can be protracted and complex. These difficulties largely arise as a result of the challenges associated with allocating risks between the parties and the bespoke nature of transmission connections. The negative aspects of the current Victorian arrangements are receding over time as the various parties, including ourselves, become more experienced in dealing with the relevant issues.

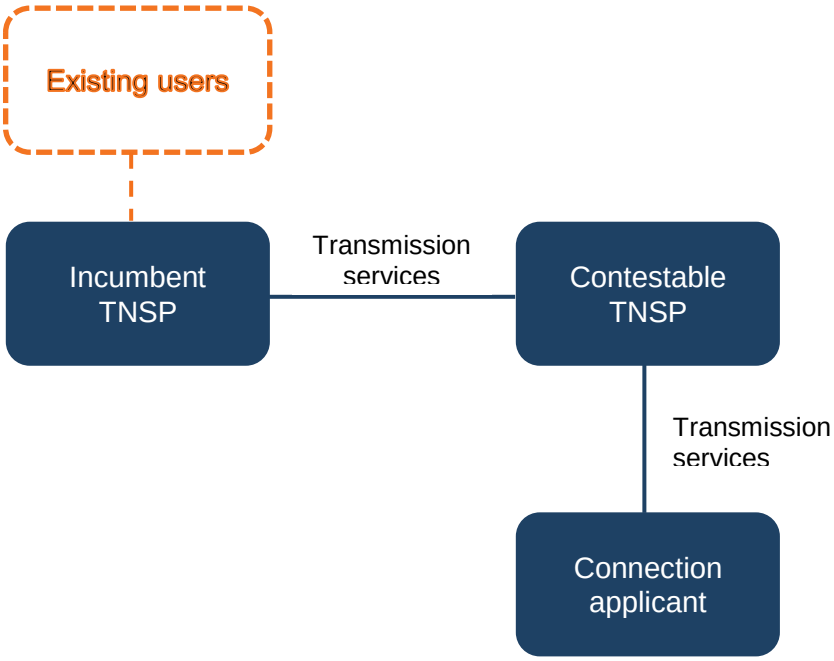
If this model was to be adopted elsewhere (with the incumbent TNSP taking on the role of AEMO in Victoria), then we anticipate more complex contractual negotiations due to:

- The need for the parties to navigate the learning curve that has already been faced in Victoria, and
- The conflict of interests faced by an incumbent TNSP who is also the owner of the shared transmission network (discussed below).

Figure 1 provides an example of a contractual structure that could be employed in conjunction with Rules that allocate responsibilities between the parties.

[2] See, for instance, NER 5.1.2.

Figure 1 – Possible contractual structure



Some generator representatives have expressed the view that a quick process is more valuable to them that a process which results in lower connection costs. As we pointed out in our previous submission, a key objective of the connections framework should be to minimise the cost of entry to the wholesale generation market. We note that contractual negotiations can be conducted quickly if the connection applicant is willing to accept the trade off in terms of price. Section 2 sets out some enhancements to Model B that are designed to simplify (and hence speed up) the contractual negotiations.

2. Enhancements to Model B

We believe that there is scope to develop a set of principles for allocating accountability between the incumbent TNSP and any contestable TNSP that designs, builds and operates connection assets. These principles could be set out in the Rules.

This approach would promote clarity, help to mitigate unbalanced negotiating positions, and simplify the contractual negotiation process. If the Rules are clear that contestable TNSPs are accountable for the performance of their assets (subject to the same limitations that apply to incumbent TNSPs), then there is no need for the incumbent TNSP to manage this risk through inflated risk premiums and/or technical standards. Allocating risk via the regulatory framework would expedite the contractual negotiation process by removing the need to resolve potentially contentious issues on a case by case basis.

This approach to accountability is broadly reflective of the approach taken in the United Kingdom. Ofgem has recently introduced reforms that increase the level of contestability in transmission, including on the shared network.[3]

AEMO supports a contestable connections model where connection applicants manage their own tender processes, using as a key input the minimum functional specifications as defined by the incumbent TNSP. There would be no ongoing role for the incumbent TNSP during the commercial negotiations apart from the pre-commissioning tests, where it would ensure that the functional specifications have been met. Instead, various parties' responsibilities with respect to the shared network would be defined in the Rules.

The Rules could include, for instance, a requirement for the AER to establish a proportionate scheme to give contestable TNSPs an incentive to manage their outages or to share in the rewards of completion on or ahead of time. Such arrangements would give scope for contestable parties to develop innovative solutions that suit the preferences of the connection applicant, while also having regard to the interests of other end users.

Under the current Victorian model, primary functional requirements (PFRs) and protection and control requirements (PCRs) are used to define the technical requirements of a connection. Consistent with the need to clearly allocate responsibility, our requirements have a particular focus on protection and control, the interoperability of communications systems and network interfaces, and testing and commissioning.

Functional specifications should not define specific assets, manufacturer, provenance or capabilities. Rather, they should set out the services that the assets need to deliver and the network conditions that the assets need to withstand.

Incumbent TNSPs may have an incentive to make functional requirements more stringent (and hence more expensive) in order to strengthen rather than maintain the shared network. There may also be an opportunity for the incumbent TNSP to specify requirements that confer a competitive advantage on itself; for instance, by requiring expertise with a specific product. The proposal for an independent engineer, as well as the desire to compete in other jurisdictions, will help to deter incumbent TNSPs from imposing unreasonable contractual requirements. In addition, there may be merit in developing a set of principles that incumbent TNSP could apply when determining the functional specifications. Such principles might include that new or altered connections:

- do not impact the security of the existing network,
- make efficient use of existing facilities,
- enable efficient future network interaction;
- maintain interconnector capability, and
- maintain end users' levels of service.

It would also be helpful for the Rules to provide for a situation where the party responsible for a substation loses its status as a registered TNSP, or the relevant contract expires. It might be justifiable for the incumbent TNSP to make provision for the costs of re-establishing

[3] Ofgem (2015) *Integrated Transmission Planning and Regulation project: final conclusions*, Available athttps://www.ofgem.gov.uk/publications-and-updates/integrated-transmission-planning-and-regulation-itpr-project-final-conclusions

throughput service if the service at the substation is not required after the term of the service contract. Alternatively, these costs could be allowed as part of the economic regulation process if the substation is connected to lines that form part of a Regulatory Asset Base.

We agree that it would be helpful if the Rules could clearly specify the extent to which TNSPs should seek substation designs that incorporate expected efficient network development, where this involves costs beyond what is required for to meet the needs of the relevant connection application. There is a difficult balance to be struck. Flexible substation designs can significantly reduce the cost of future connections and reduce risks to system security. However, it can also cause the connection applicant to bear unnecessary additional costs and add a contentious element to the commercial negotiations. We note that the costs associated with flexibility for future development can be minor compared to the overall cost of the connection; for instance an option to purchase adjacent rural land can be obtained cheaply. There may be scope to set a monetary limit on the additional costs that an incumbent TNSP may require in order to allow for future development.

3. Changes to the definitions relating to connections

AEMO encourages simplified definitions relating to connections. The current lack of clarity favours incumbent TNSPs who are able to construe ambiguous provisions in their favour. We agrees with the AEMC that the definitions should enable a clear distinction between those assets and services that can be provided contestably, and those that must be provided by the incumbent TNSP as a negotiated service under the NER. We support the principles underlying the definitions proposed in the discussion paper, however we note that in these matters, the legal drafting is key.

4. Measures to increase transparency

AEMO supports obligations to publish minimum technical standards as they can help:

- Connection applicants to obtain an early understanding of the issues; and
- Contestable TNSPs to compete on an even playing field.

We also support the idea of cost breakdowns for non-contestable service offers.

However, it is important that any requirements are measured and include checks and balances. If the minimum standards are set too high, they can be a barrier to entry and an unnecessary cost, particularly if those standards grant the incumbent an inherent advantage and tend to stifle innovation (e.g. a requirement to keep spares for expensive substation primary assets). They may also increase costs by reducing the TNSP's ability to adopt a flexible approach. In practice, the technical standards vary depending on the relevant circumstances. For instance:

- An inexpensive substation layout may be sufficient on some parts of the network but present unacceptable risks on a line that already has a number of cut-ins
- A connection applicant that wishes to connect to an interconnector is likely to encounter higher technical standards than a connection applicant that seeks to connect away from major flow paths.

Minimum standards may encourage TNSPs to be risk-averse, with the standard terms set at a level that protects the TNSPs' interests under the least favourable scenario. Similarly, standard connection contracts have the potential to save time and cost but they can be unnecessarily restrictive in bespoke projects such as transmission connections.

To address these issues, the technical standards and standard contractual terms should be capable of being tailored to suit the connection applicant's specific circumstances. For instance, the published documents could explain the methodology that the incumbent TNSP uses to determine the technical standards.

5. Negotiating principles

AEMO agrees that a single aligned negotiating framework is preferable to the current arrangements. However, hard-wiring detailed provisions into the Rules has the potential to reduce flexibility and become outdated. Flexibility is especially valuable as new regulatory frameworks are bedded down. Whilst to date the TNSPs' negotiating frameworks have been relatively high level, there may be a need for more detailed regulatory provisions if the Commission adopts Model B.

We suggest that the AER could be responsible for developing and maintaining a negotiating framework, based on high level principles set out in the Rules. This would permit the framework to evolve as circumstances change.

6. Application in Victoria

AEMO considers that at this stage, it is not clear whether the proposed framework is consistent with the Victorian arrangements. We note that COAG adopted a narrow view of what elements of the original Rule Change proposal were consistent with the Victorian arrangements.

To the extent that the proposed reforms represent an improvement on the current contestable framework that applies in Victoria, AEMO is happy to work with the AEMC to develop arrangements that are compatible with the Victorian framework.

7. Concluding remarks

AEMO looks forward to the development of a connections model that allows competition to thrive, is flexible enough to recognise that no two connections are alike and has the ability to evolve over time.

We hope that you find these comments helpful. We would welcome the opportunity to work with the AEMC to develop contestable arrangements that clearly allocate responsibilities and minimises complexity. If you would like to discuss any of the issues raised, please contact Jess Hunt on 08 8201 7315.

Yours sincerely,

David Swift
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