



27 January 2017

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

Locked Bag 14051  
Melbourne City Mail Centre  
Victoria 8001 Australia  
T: 1300 360 795  
[www.ausnetservices.com.au](http://www.ausnetservices.com.au)

Via website: [www.aemc.gov.au](http://www.aemc.gov.au)

Dear John

**Draft Rule Determination: Transmission Connection and Planning Arrangements**

AusNet Services welcomes the opportunity to make this submission to the AEMC's Draft Rule Determination on the Energy Council's proposed Rule Change to reform the Transmission Connection and Planning Arrangements (DRD). AusNet Services supports contestability in transmission connections to the maximum extent practicable and is very disappointed that the AEMC has chosen to reject the model previously developed with strong stakeholder support (referred to as model B). The AEMC's reasoning is not compelling and is incorrect as explained in the attachment.

It is highly unlikely that if the DRD is implemented any cost savings will be achieved through this mechanism for the identified user shared assets (IUSA). It is also unlikely that connecting parties will see any advantage to using the competitive mechanism in the DRD model for the IUSA as it will only create time delays and added complexity. However, the incumbent TNSP is not under any regulatory obligation to provide a cost effective solution with the DRD model.

With the need for many new transmission connections to facilitate the transition to a clean energy future the AEMC should be focussed on reducing transmission connection costs as far as possible to make the energy market efficient and therefore industry efficient. It is incumbent on the AEMC to determine a framework that achieves this end. In our view and that of many other stakeholders model B achieves this far better than the DRD model. The AEMC should reconsider the DRD and return to the superior value for customers and ultimately consumers offered by that model.

Please contact Kelvin Gebert, our Manager Regulatory Frameworks on 03 9695 6603, with any inquires.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Hallam", is written over a light blue circular stamp.

Tom Hallam  
**General Manager Regulation and Network Strategy**

**Attachment to AusNet Services' Submission on the National Electricity Amendment  
(Transmission Connections and Planning Arrangements) Rule 2016  
Draft Rule Determination**

The attachment provides additional detail on AusNet Services' submission. The previous phase of consultation on this matter explored a model for contestability that allowed contestability of the high-level design and the operating and maintenance of the assets (referred to as model B). Many stakeholders, in fact the majority, saw this as providing the substantial benefits in a revised framework. Having explored this the AEMC has rejected the concept, but the reasoning is not compelling and as shown later, not correct. The National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2016: Draft Rule Determination (DRD) makes extensive and complex changes to the connection regime in the NEM but, in our view, fails to capture the majority of the benefits that a contestable network provision framework can offer. It is deficient in terms of the National Electricity Objective and at odds with many stakeholder views in the previous consultation phases. We note it is also counter to the regime for connections established in the UK and also proposed for large shared network augmentations in the UK.

This DRD fails to open up contestability of the delivery of connection assets to the maximum practical extent so that customers will not get the full benefits of competition in driving down the cost of network services.

## **KEY PROBLEMS WITH THE DRAFT RULE DETERMINATION**

The AEMCs reasoning for reverting to arrangements where the incumbent TNSP must operate and maintain all shared network assets required for network connection is not compelling and does not justify constraining the contestable provision of transmission services.

### **1. The central AEMC argument used to limit the level of contestability is incorrect**

On page 41 the DRD says "The current regulatory framework established by the NEL, Rules and jurisdictional licensing regimes does not contemplate an approach where responsibility for the shared network is split between multiple owners or operators. Compliance with the extensive nature of the obligations placed on NSPs under the NEL, Rules and jurisdictional electricity legislation has the resulting outcome that the safety, reliability and security of the shared transmission network is the responsibility of the incumbent TNSPs (i.e. one party - the incumbent TNSP in each NEM jurisdiction - is responsible for the shared transmission network." This argument is used throughout the determination to justify the non-contestability of the operation and maintenance of the identified user shared assets (IUSA).

This statement, in our opinion, is not an accurate characterisation of the current regulatory framework. Neither are safety, security and reliability therefore dependent on such a characterisation.

Examining the framework for each area of security, safety and reliability separately shows that the incumbent TNSP in each NEM jurisdiction is not solely responsible for the shared transmission network, and that these issues are already successfully managed in more open service arrangements in Victoria and overseas.

#### **a) Responsibility for system security**

Under the National Electricity Law (NEL), the statutory functions of AEMO are listed and one item is "to maintain and improve power system security"<sup>1</sup>. There is no similar function assigned to any other Participant or Participant category.

---

<sup>1</sup> NEL (version 15.12.2016), Part 5, Division 1, Clause 49 (1)(e)

In the National Electricity Rules chapter 4 is entitled Power System Security and clause 4.1.1 is entitled Purpose of Chapter. In this clause, there are a number of purposes described but in particular in sub-clause (iii):

“(iii) to establish processes to enable AEMO to plan and conduct operations within the power system to achieve and maintain power system security;

(a) ...

(b) By virtue of this Chapter and the National Electricity Law, AEMO has responsibility to maintain and improve power system security. This Chapter also requires the Jurisdictional System Security Coordinator for each participating jurisdiction to advise AEMO of the requirements of the participating jurisdiction regarding sensitive loads and priority of load shedding and requires AEMO to provide copies of the relevant load shedding procedures to the Jurisdictional System Security Coordinator.”

In NER Clause 4.3 Power System Security Responsibilities and Obligations it is clear that AEMO has the responsibility for maintaining power system security and relies on other Participants for information and System Operators, acting as agents for AEMO, to carry out certain functions. The regime is one of self-compliance with certain standards by all Participants<sup>2</sup> and AEMO being responsible for maintaining overall security. It is unclear how the incumbent TNSPs would be responsible for jurisdictional system security.

The concept of system security only being an issue for the shared network is also incorrect as has recently been demonstrated in South Australia, where failure of shared network transmission towers during a severe storm coincident with the tripping of multiple generators caused the blackout of the entire state electricity system. It was the combination of both the shared network asset failure and the generator tripping that caused the outcome. This is the most extreme outcome of inadequate power system security. Power system security can be compromised on the Dedicated Connect Assets (DCA), the generator plant and any other part of the power system. Radial parts of the network including DCAs can affect both system security and system capability if they operate inappropriately. Therefore the distinction drawn in the DRD between obligations on the DCA being different to the IUSA is not rational.

**The regime is one of self-compliance of all Registered Participants including TNSPs and oversight and responsibility for maintaining power system security is with AEMO. The security is currently managed through NER performance standards for generators, loads and network service providers (both market and regulated) and connection agreements (which require AEMO approval for matters affecting system security). NER clauses such as S5.1.8 which requires NSPs to meet stability standards in their planning and operation role are required to ensure that power system can operate securely but the ultimate obligation is with AEMO and the NSPs operate under a self-compliance regime.**

#### **b) Responsibility for Safety**

The regime for system and public safety in the regulatory regime is similar to the regime in OH&S legislation around the country. AEMO can direct Participants to protect public safety or power system security but Participants can also refuse a direction if they think it may compromise public safety. OH&S legislation has the concept of everyone being responsible for their own safety and that of their fellow workers and the public. In the same manner there is no single entity in the NEM that is responsible for safety but it is the responsibility of all.

It is wrong therefore to say that the incumbent TNSP has any stronger role for safety in a jurisdiction than any other party. This therefore clearly does not justify having any difference in contestability for DCA or IUSA parts of the network.

---

<sup>2</sup> In the NER Schedule 5.1 defines the NSP obligations while Schedules 5.2 and 5.3 define the generator and load obligations to meet system standards (defined in S5.1a)

### **c) Responsibility for Reliability**

The reliability standard referred to in the DRD in Box B1 for NSW "Transmission Network Design and Reliability Standard for NSW December 2010" actually sets a redundancy standard for planning the network and does not have a reliability standard. These redundancy standards will be used to determine the functional specification of the Connection Assets. The reliability regime is one of incentives and penalties in the STPIS section of the revenue determination (Chapter 6A) and this can easily be included in the Network Operating Agreement so that outages caused by the contestable party's assets will incur a penalty to the contestable party.

### **2. The AEMC argues that singular accountability with the incumbent TNSP in each jurisdiction should not be compromised and cannot be managed through NER obligations and contractually**

There are already a number of parties operating the shared network in the NEM with accountabilities allocated by contract and NER obligations as there are six incumbent TNSPs (with AEMO and AusNet Transmission in Victoria) as well as AusGrid, ActewAGL Distribution, Basslink, Murraylink, Directlink, Transmission Operations (Australia) and Transmission Operations (Australia) 2 who are registered TNSPs as well.

The Victorian transmission contestability regime works using NER obligations and contracts. The UK Competitively Appointed Transmission Owner (CATO) proposes to use rules and contracts to manage accountability and responsibility for transmission services including the shared network. This regime is based on their successful process for offshore transmission tendering which has produced significant cost savings<sup>3</sup>.

Many of the arguments given in chapter 3 of the DRD if applied to energy supply more broadly would lead to the conclusion that deregulation and disaggregation is risky and inappropriate. The AEMC's preferred option appears to be to have a single vertically integrated entity who is responsible from supply to delivery of electricity to customers.

### **3. The AEMC contestability framework in the DRD does not promote significant contestability**

The AEMC appears to have sought to address concerns made by stakeholders about the incumbent TNSP having to accept the problems that come with assets that may be incompatible with their own capabilities, or which prove to be sub-standard, by giving the incumbent greater control over the asset specification, and full responsibility for control and operation. This appears to leave proponents (connecting generators) with no option other than to engage the incumbent TNSP to undertake the whole IUSA and once they are engaged they are not encumbered by regulatory obligations to provide a cost effective solution.

An organisation wanting to provide competitive transmission services will have to go to the incumbent TNSP to get a quotation for the operation and maintenance of the IUSA as part of their tender for the services. There is no pressure on the incumbent to provide competitive terms. In addition the proposing organisation will have to expose their design to the incumbent TNSP, which very likely also has a merchant arm bidding for the same project. In all respects, the removal of the operation and maintenance from the new competitor will make the process very unattractive to them as there is too much left in the control of the incumbent TNSP. The arrangements leave very little opportunity to innovate and create efficiencies and cost savings for the connecting party.

The arrangements are likely to also be problematic for the incumbent TNSP, as the framework has the look of a proponent led augmentation, but with significant responsibility and obligations placed on the incumbent TNSP. This appears to be a recipe for dispute and high cost solutions.

---

<sup>3</sup> See OFGEM website <https://www.ofgem.gov.uk/electricity/transmission-networks/offshore-transmission>

For example some reasons for increased cost outcomes compared to a fully contestable delivery option are:

- The incumbent TNSP, with whom the generator is obliged to negotiate, will want to ensure that it is not left out of pocket over the operating and maintenance lifetime of the asset so it will either take a worst case approach to the future costs (e.g. assume failure of the major components during the lifetime) and pass them on to the generator or it will seek to influence the design (e.g. specification of assets to ensure extremely low failure rates and maintenance costs).
- Depending on the financing of the project, having the control of the asset removed from the ownership will be perceived as adding risk to the owner and therefore the cost of finance and/or insurance will go up.
- The connecting party has no option but to go to the incumbent TNSP for operation and maintenance and therefore has little or no negotiating power.
- The provision of spares etc. for the assets will be excessive as the TNSP will not want to reduce its holdings for its own network but will not want to add any risk from the new assets. This issue can have a significant impact on costs as a spare transformer phase for a large 500/220kV transformer can be up to about 15-20% of a new transformer installation project.

## **A LOST OPPORTUNITY FOR FURTHER TRANSMISSION CONTESTABILITY**

The framework should provide a starting point whereby contestability may be considered for broader transmission application, e.g. interconnectors. As it stands, it appears the AEMC's thinking is that this is not possible. It is unlikely that this is a commonly held view however, amongst the industry and stakeholders. AEMO says that contestability is essential to deliver the economic benefits assessed to be deliverable from interconnector augmentation. A quote from Mr Mike Cleary, Chief Operating Officer of AEMO, on page 4 of AEMO's Energy Update magazine is "The NTNDP highlights the need for coordination and contestability to maximise the benefits of transmission investments across the NEM and ultimately for consumers, making transmission development competitively priced, reducing the costs for consumers, and increasing the benefits and efficiencies further".

## **COMPARISON WITH THE UK COMPETITIVELY APPOINTED TRANSMISSION OWNER (CATO) ARRANGEMENT**

The UK regulator OFGEM has operated a contestable offshore transmission regime for connection of their large offshore wind farms since 2009 and claim that they have saved consumers between \$1b and \$2b (more than 20% of the connection cost) since that time<sup>4</sup>. They are now planning to extend that regime to CATOs which cover any new transmission asset including new connections. The regime is one where the system operator defines the functional specification as part of the planning process and the existing transmission owners do the cut-in works. Everything else is contestable and tendered by OFGEM. This regime is similar to the Victorian regime and both operate satisfactorily at present, is seen to be a practical and prudent approach in the UK, and begs the question as to why this model and its benefits are not being pursued by the AEMC.

---

<sup>4</sup> "Evaluation of OFTO Tender Round 2 and 3 Benefits" OFGEM March 2016 Final Report

## **CONCLUSION**

The AEMC has not demonstrated compelling reasoning for not adopting the model B (which has a greater degree of contestability than the DRD model), and the DRD is accordingly not in the long term interests of consumers. The AEMC should revise its DRD and adopt model B. This is important for the NEM as the transformation to renewable energy leads to significant transmission reconfigurations and there is massive cost that can be more effectively managed to minimize the burden on consumers. The 2016 AEMO NTNDP on page 41 estimates that to connect the Victorian Renewable Energy Target generation in north-west Victoria to the NEM would cost in excess of \$2b between connection and shared network assets. The AEMC should be focussed on reducing transmission costs as far as possible to make the energy market efficient and therefore industry efficient. It is incumbent on the AEMC to determine a framework that achieves this end. In our view and that of many other stakeholders model B achieves this dramatically better than the DRD model. AEMC should reconsider their DRD and return to that model.