Clarity, competition and connections

Response to Transmission connection and planning arrangement

30 June 2016

Kristal Burry, Policy Officer

Energy + Water Consumers' Advocacy Program

Level 5, 175 Liverpool Street, Sydney NSW 2000
Phone: 61 2 8898 6500 • Fax: 61 2 8898 6555 • www.piac.asn.au

The Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit law and policy organisation that works for a fair, just and democratic society, empowering citizens, consumers and communities by taking strategic action on public interest issues.

PIAC identifies public interest issues and, where possible and appropriate, works co-operatively with other organisations to advocate for individuals and groups affected. PIAC seeks to:

- expose and redress unjust or unsafe practices, deficient laws or policies;
- promote accountable, transparent and responsive government;
- encourage, influence and inform public debate on issues affecting legal and democratic rights;
- promote the development of law that reflects the public interest;
- develop and assist community organisations with a public interest focus to pursue the interests of the communities they represent;
- develop models to respond to unmet legal need; and
- maintain an effective and sustainable organisation.

Established in July 1982 as an initiative of the (then) Law Foundation of New South Wales, with support from the NSW Legal Aid Commission, PIAC was the first, and remains the only broadly based public interest legal centre in Australia. Financial support for PIAC comes primarily from the NSW Public Purpose Fund and the Commonwealth and State Community Legal Services Program. PIAC also receives funding from NSW Trade and Investment for its work on energy and water, and from Allens for its Indigenous Justice Program. PIAC also generates income from project and case grants, seminars, consultancy fees, donations and recovery of costs in legal actions.

Energy + Water Consumers' Advocacy Program

This Program was established at PIAC as the Utilities Consumer's Advocacy Program in 1998 with NSW Government funding. The aim of the program is to develop policy and advocate in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives policy input to the program from a community-based reference group whose members include:

- Council of Social Service of NSW (NCOSS);
- Combined Pensioners and Superannuants Association of NSW;
- Tenants Union of NSW;
- Ethnic Communities Council of NSW;
- Physical Disability Council of NSW;
- St Vincent de Paul Society of NSW; and
- Good Shepherd Microfinance.

Introduction

PIAC welcomes the opportunity to comment on the Australian Energy Market Commission's (AEMC) Discussion Paper on the National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule Change.[1]

The paper sets out the changes the AEMC proposes to make to reduce the complexity, ambiguity and lack of clarity in the National Electricity Rules (NER) transmission connection framework, and redress the asymmetric power held by transmission network service providers (TNSPs) when negotiating with parties seeking connection to the transmission network.

The Discussion Paper follows on from an AEMC consultation paper in November 2015 that responded to the rule change request from COAG Energy Council. The rule change resulted from recommendations made in the AEMC Transmission Framework Review (TFR), undertaken between August 2010 and April 2013. The Review identified two main areas of concern for parties looking to connect to the transmission system:

- Complexity, ambiguity and lack of clarity in the rules
- Asymmetric power held by the TNSPs when negotiating with and connecting parties.[2]

One of the biggest issues identified was that the Rules do not clearly set out or classify the services that are provided for the various types of assets that are required for connection.

The Review found that the complexity and ambiguity mean that the NER transmission connection framework is subject to a degree of interpretation by connecting parties and incumbent TNSPs. These issues are compounded by the asymmetric power TNSPs hold in negotiations with connection parties. As a result, connection experiences can be unpredictable, may vary across transmission network boundaries, and can result in unsatisfactory outcomes in terms of cost and timeliness.

To address these issues, the rule change proposes to improve transparency, contestability and clarity in the connection frameworks, as well as enhance transmission planning and decision-making frameworks.[3]

The Discussion Paper focuses primarily on connecting to the transmission system, rather than on planning. The AEMC does not explicitly say how it intends to address planning issues, even though these issues were raised in the consultation paper.

Generators, large users and distribution network service providers (DNSPs) are the main parties that may require connection to the transmission system. However, this rule change is specifically focused on generators. The AEMC is still considering if these changes should apply to large user

1 AEMC, *National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule Change*, Discussion Paper, June 2016.

2 AEMC, *National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule Change,* Consultation Paper*,* November 2015, 13-14.

3 AEMC see above no 1, 1.

connections, which are referred to as load connections. It may be that the proposed changes will be appropriate for load connections and thus will not require separate changes to be made.[4]

For the purposes of simplicity and consistency with the Discussion Paper, when referring to 'connecting parties' in this submission we mean generators only. Victoria operates under a declared system where the ownership and operation of the transmission system is split. The Australian Energy Market Operator (AEMO) is responsible for the shared network. It determines when investment is required and procures these services from declared transmission system operators (DTSOs). The connecting party is able to choose which DTSO they wish to contract, and build, own and operate the new assets.[5] How the proposed rule change applies to Victoria will be determined during the rule determination process.

Introduction of new terms and definitions into the National Energy Rules

The AEMC proposes to introduce two new categories of transmission assets:

- **Dedicated connection assets** – assets, such as the connecting line that is used to connect a particular user to the transmission network but do not form part of the shared network; and
- **Identified user shared assets** – assets that are used to connect a particular user to the transmission network and form part of the shared network, but are not used exclusively by the connecting party, such as a substation.[6]

PIAC supports greater clarity in the definitions of connection types in the NER, especially for connecting parties who operate in multiple jurisdictions as currently each jurisdiction uses variations or very different terms for these assets. Providing greater certainty of roles and responsibilities will reduce the time and costs associated with connecting to the transmission system. The introduction of defined terms is also critical to the effectiveness of the other elements of the rule change, especially the introduction of greater contestability.

The application of these definitions may differ if the connection requires the construction of a substation; if the difference between a dedicated asset and a shared user asset lies where the power flow is isolated, the connecting asset would be considered a dedicated asset, and the substation a shared asset.[7] PIAC considers that this approach could be applied consistently across these scenarios.

Recommendation 1

PIAC supports the introduction of the proposed definitions for a dedicated connection asset and identified user-shared assets into the NER, as this provides essential support to the rest of the rule change. Improved clarity will reduce the time and complexity involved in connecting to the transmission system.

4 Ibid 4 and 14.
5 Ibid 56.
6 Ibid,14.
7 Ibid 14 and 15.

Contestability

The issue of contestability is relatively straightforward for dedicated connection assets, as it is easier to delineate responsibility and ownership in this space.

Dedicated connection assets

The AEMC proposes to clarify that the provision of all services for dedicated connection assets is contestable on the basis that the risks of inadequate design, construction and operation are confined to the user alone, and do not affect the operation of the shared network and the provision of safe, reliable and secure electricity services to consumers.

The rule change proposes that the owner of a dedicated asset should be required to allow access to a third party where there is spare capacity and the introduction of a third party will not negatively affect the owner. They will be required to negotiate this access in good faith. PIAC is supportive of this, as it is likely to reduce the costs of the system overall and reduce the need for new infrastructure. This is particularly the case with large-scale renewable generation that is located at the renewable energy source rather than close to the transmission infrastructure, which allows dedicated connection assets to support multiple connections as there is greater scope along the line.

PIAC is concerned about the proposal to allow dedicated connection assets to be transitioned to the shared network. This has the potential to reduce the benefits gained from introducing contestability into this area. [8] If the asset becomes a part of the TNSP's regulated asset base, customers end up paying for this asset. Therefore it is important to ensure the correct valuation, through an appropriate depreciation method, of the asset at the time of the transition to reduce the potential for the collection of inefficient revenue.

The Discussion Paper outlines the triggers for when a dedicated connection asset is transitioned to the shared network, where a:

- Large user connects to a dedicated connection asset; or
- TNSP is augmenting the existing shared network to facilitate additional capacity, and the most efficient option would be to use a dedicated connection asset.[9]

One reason the TNSP may acquire a dedicated asset is that if the TNSP is augmenting the system, the acquisition of an existing dedicated asset is the cheapest option. PIAC considers that an option for the TNSP is to commercially acquire the services of the dedicated asset rather than transition the asset into the shared network. This would result in the TNSP paying for the service of the asset via a commercial transaction, rather than owning it as part of its RAB and therefore included in economic regulation. This approach supports market contestability and avoids placing a potential cost burden on consumers. Amongst the submissions to the AEMC to date, there has been no agreement over who should be responsible for overseeing this process. If the TNSPs acquire the service of the dedicated asset but do not transition the asset into the shared network, PIAC is of the view that this should occur through a commercial basis. However, if the TNSP acquires the asset, the transfer should be overseen by the AER.

---

8 GDF Suez submission on *Transmission Connection and Planning Arrangements Rule change (Ref ERC0192)* consultation paper, January 2016, 3.

9 AEMC see above no 1, 38.

PIAC recommends that if an asset is transitioned into the shared network, the AER should review the transition to ensure it passes a 'public interest' test or materiality threshold to determine if the transition is appropriate. This can be done through the regulatory investment test (RIT-T). PIAC considers that regulation of these assets should determine the process for transition assets into the shared network. Finally, PIAC agrees that the process for determining whether a dedicated asset is transitioned into the shared network should be clear and consistent from the beginning. This will ensure that all the necessary information is available for investment decisions.

Recommendation 2

PIAC recommends that third party access should be provided to a dedicated connection asset and the owners of the asset should negotiate in good faith to ensure this access.

Recommendation 3

PIAC recommends that the trigger to enable the transfer of a dedicated connection asset into the shared network should include a public interest test to ensure that the asset can be incorporated efficiently into the RAB.

Identified user shared assets

The shared transmission network is the main extra high voltage network that potentially provides supply to more than a single point. The category of identified user shared assets encompasses those assets that are required to facilitate a party's connection, but which form part of the shared transmission network. The rule change request proposes to treat these assets differently to other shared transmission assets by introducing contestability into their ownership and construction.

The boundary between the connecting party/assets and the network is less clear in relation to identified user shared assets. PIAC agrees that, as identified user shared assets form part of the shared network, any new arrangements will need to involve clear accountability for the safe, reliable and secure supply of electricity across the shared transmission network.

The AEMC has suggested two possible models to introduce contestability and provide clarity in the process.

Model A: The rule change request

This model is in line with the proposed model put forward in the rule change request. Under this model, construction and ownership of identified user shared assets could be provided on a contestable basis. All other services (i.e. operation, maintenance etc.) would be provided by the incumbent TNSP.

Negotiation principles for third party connection would be the same for both models. These principles are designed to prevent the original connecting party from inhibiting third party connections to the asset and thus the network at that location. As outlined in the Discussion Paper, allowing the original party to determine who connects to the asset could lead to anti-competitive behaviour and contradict the rationale for keeping generation and transmission separate.[10]

[10] Ibid 14.

Model B: Increased contestability with TNSP accountability

This model introduces contestability for the majority of services for identified user shared assets, including operation and maintenance. It has been developed based on stakeholder submissions to the consultation paper, which generally indicated support for a more contestable approach to identified user shared assets than that proposed in the rule change request. Under this model the incumbent TNSP would ultimately remain accountable for any impact these assets have on the shared transmission network.

This model requires the connecting party, the TNSP and any third party to enter into agreements to ensure that the TNSP is able to meet its obligations with respect to the reliability and safety of the transmission system. This may be achieved in a number of ways, but there is still an issue of the incumbent TNSP having greater control over the outcomes of these connection agreements, which would negate part of the original intent of the rule change. In order to overcome this, it may require the connecting party to incur more time and cost. PIAC is unable to comment in more detail about the full extent of this issue. However, given the rule change also proposes to strengthen the negotiation and dispute resolution process, PIAC believes that these changes together may balance out the additional contractual complexities.

Contestability and ring fencing

The AEMC has asked stakeholders to comment on which model:

- improves outcomes for connecting parties with regard to the transparency, timeliness, cost and complexity of connections to the transmission network; and
- maintains clear accountability for outcomes on the shared transmission network.

There is a delicate trade off between the benefits of contestability and the complexity of implementing the model. PIAC is supportive of opening up a greater number of services and areas to contestability if this creates an opportunity for auxiliary services and demand management services to operate in this space. Contestability also improves transparency regarding the costs of connecting and providing these services at the lowest or most efficient price. In order to satisfy the AEMC's requirement for these changes, the other aspects of this rule change must also be adopted; without clear and consistent negotiation and dispute resolution processes, increased competition will not be effective.

Clear and consistent application of the ring fencing guidelines is necessary, especially the provision of batteries and auxiliary services, such as load control or inertia markets. Organisations such as the Clean Energy Council, PIAC along with other consumer advocates have raised these issues in submissions to the AER's ring fencing guideline preliminary positions paper. Of particular note for this submission is the issue of the incumbent TNSP using its monopoly power to prioritise affiliated connections and cross-subsidise affiliated services, therefore providing less favourable terms and conditions or costs to non affiliated parties.[11] The CEC is also concerned that these are negotiated services and therefore are even more difficult to

[11] TEC, PIAC, CALC, CUAC, ECCC, Submission to AER Electricity Ring-Fencing Guideline Preliminary positions paper. Small consumer groups' submission. May 2016, 2-3.

ring-fence.[12] These issues will affect the ability of a connection party to effectively negotiate connection costs and standards.

The trade-off is increased competition, which would hopefully lead to lower costs and faster connection timeframes, as opposed to greater complexity in managing and ensuring that reliability and safety are maintained.

PIAC recommends that competitive transmission and connections services are structurally separated in line with our policy approach to ring-fencing. If this cannot be achieved then these services should be appropriately ring-fenced. The application of the ring-fencing principles should be consistent and minimise the opportunities for TNSPs to favour their ring-fenced business over other connecting parties.[13]

At this stage, PIAC is unable to determine which of the two models provides greater benefit. However, PIAC supports contestability in this space, so long as a higher level of contestability does not create more complexity and reduce clarity. PIAC will wait for more detailed analysis from the AEMC before making a final decision.

Recommendation 4

PIAC recommends that more analysis is needed from the AEMC before a decision can be made as to which model of contestability is better.

Recommendation 5

PIAC recommends that contestable services should be offered by structurally separate entities rather then ring-fenced entities.

Proposed transparency requirements

The rule change proposes that the TNSPs publish on their websites the following information:

- Design standards and philosophies
- Standard-form connection contracts
- Pro-forma preliminary programs, including relevant milestones and indicative timeframes.[14]

In addition, the rule change requires that the TNSP provides a quotation that contains:

- a range of options (terms of location and configuration)
- a reasonable cost breakdown for identified user shared assets.[15]

PIAC is always supportive of greater transparency in markets. We believe that this can be achieved through clarification of what information TNSPs should provide, and by requiring that TNSPs provide information on their websites, in a quote or reply to a connection request. Greater access to information, specifically technical specifications, will enable connecting parties to better negotiate access arrangements and reduce the time and complexity involved in connection applications. Finally, improved price transparency will enable connecting parties to fairly

12 Clean Energy Council submission to AER Electricity Ring-Fencing Guideline, preliminary positions paper, May 2016, 3.
13 TEC see above no 11, 10.
14 AEMC see above no 1, 16.
15 Ibid 17.

negotiate for these services. PIAC understands that balance is required between full transparency and commercial confidence. Where this line is drawn, emphasis should be placed on ensuring that the benefits of transparency are met.

Recommendation 6

PIAC endorses that the AEMC's proposed changes to the level of information the TNSPs should provide.

Reviewing negotiating principles

Negotiated transmission service principles, as set out in Chapter 6A of the NER, form the basis for the negotiation for connection between the TNSP and the connecting party and include pricing and terms and conditions of access.

The current rules require that each TNSP have a negotiating principles framework. This rule change will remove this individual requirement and consolidate it into a single negotiating framework that will be applied to all of the TNSPs through the NER.[16] The introduction of a standard set of negotiation principles would provide consistency across the National Energy Market (NEM). This in turn would reduce costs and time for connecting parties that operate in multiple jurisdictions. At the same time, the process for creating these principles would be simplified as the AER would only be required to do it once for the entire NEM.

The Transmission Framework Review in 2013 found that the current negotiating framework does not provide sufficient protections for connecting parties given the asymmetry in power between the incumbent and the connecting party. This has resulted in inefficient outcomes in terms of costs and time. The AEMC found that existing principles focussed only on cost and prices and did not cover other areas that are often the cause of disagreement between parties.[17]

To address this issue, the principles will cover the:

- Design of future expansion
- Design and appropriate specification
- Terms and conditions of access – risk allocation in contracts, as well as timing obligations[18]

The application of these principles will vary depending on the model for contestability that is adopted. If model A is incorporated into the rule change, the principles will not apply to construction and ownership. If model B is chosen, the majority of services would be contestable and, as such, the negotiating principles would only apply to cut-in works (this is the process of physically connecting the new asset to the existing transmission system) and where the functional specification of the design of the connection asset is set by the TNSP.[19]

As previously mentioned in this submission, other services such as demand management and load control through grid level batteries may also be provided to a connection party, particularly large scale renewables that operate intermittently and require different services to ensure that

16 Ibid 24.
17 Energy Council, *Transmission Connection and Planning Arrangements Rule Change request proposa*l , July 2015,14 and 15.
18 AEMC *Final Report Transmission Frameworks Review* April 2013,162.
19 AEMC see above no 1, 28.

they meet the standards and reliability required by the transmission system. The negotiation principles should be applied to the development of these services where they are required to meet the functional specification set by the TNSP.

Recommendation 7

PIAC recommends that the negotiation principles be applied to all auxiliary services required by connecting parties, where they are required to meet the functional specifications set by the TNSPs.

Introducing the ability to engage an independent engineering expert

The rule change proposes to allow either party to engage an independent engineer to provide advice at any stage of the process on issues such as constraints in connecting a generator, methods to address the constraint, and whether assets have been built according to the TNSP design and timeframes for connection.[20] This will act to redress the imbalance of power between the connecting party and incumbent TNSP. It will also ensure any issues are addressed before they escalate to the level requiring dispute resolution.

These provisions will be incorporated into the NER and will outline:

- the process of appointing an accredited expert;
- requirements for the TNSP to inform connecting parties of their right to call for an independent expert;
- the process to follow if both parties cannot agree on which expert to use from a list of accredited experts; and
- that the expert's advice would not be binding but could be used in the arbitration process.[21]

PIAC agrees with the AEMC that it is important to ensure that either party should not use the independent expert as a stalling tactic.[22]

Recommendation 8

PIAC supports the introduction of a list of accredited engineers that can be called upon by either party to provide advice and address any issues arising during the connection process.

Clarifying the dispute resolution process

The rule change proposes to amend Part K of Chapter 6A to ensure that the commercial arbitration process applies to all disputes arising from the negotiation of a connection service.[23]

PIAC supports the introduction of greater clarity into the formal dispute resolution process. PIAC notes the ENA's comment that the dispute resolution process does not need amendment on the basis that, to date, no formal complaint has been raised through this process. PIAC disagrees with this logic because connecting parties may feel disadvantaged by the power imbalance inherent in disputes with an incumbent TNSP, the only transmission network they can connect to in each jurisdiction.[24]

20 AEMC see above no 18, 168.
21 AEMC see above no 1, 30-31.
22 Ibid 31.
23 Ibid 29.
24 AEMC see above no 2, 29.

Recommendation 9

PIAC endorses the AEMC's proposal that the rules be amended to ensure commercial arbitration applies to all disputes during the negotiation of a connection service.

Enhanced transmission business functions

PIAC notes that a number of issues are not addressed in the Discussion Paper, but which were raised in the rule change request and consultation paper. These issues include inter-regional investment options, transmission business input in the NTNDP, and consistency of annual planning reports. PIAC would like the AEMC to confirm when these issues will be dealt with.

Conclusion

This rule change will introduce greater contestability, transparency and clarity for parties wishing to connect to the transmission system. This is particularly important as networks begin to use decentralised power sources in an evolving energy system. Providing more certainty and contestability will support the introduction of large-scale renewable generation and provide opportunities for innovative generation and energy use.

The core purpose of this rule change is to reduce complexity, ambiguity and improve clarity in the rules to ensure connecting parties are able to negotiate effectively with the incumbent TNSP. The introduction of defined terms for the types of assets and user groups into the NER provides clarity, certainty and transparency to all parties. The same can be said of the move to strengthen and simplify the negotiation principles and dispute resolution process. PIAC is generally supportive of contestability in this space, although we also acknowledge that implementing the different models of contestability may involve additional complexity.