Competition issues for contestable transmission connection projects

Energy Networks Australia

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1. Introduction and summary

1.1 Introduction

1. Energy Networks Australia (ENA) asked Incenta Economic Consulting (Incenta) to provide a report on competition issues for contestable transmission connection services. Specifically, ENA asked for advice on whether, given the nature of competition and measures that already exist, there is a need for additional ring-fencing measures to protect competitive outcomes in the market for contestable transmission connection services.[1]

1.1.1 Context for this report

2. Our investigation is being undertaken in the context of the Australian Energy Regulator's (AER) current review of the transmission ring-fencing guideline (TRFG).[2] In its review the AER has considered the need for additional measures to protect outcomes for contestable connection services. In its Issues Paper for the review the AER stated its initial view was that strengthened functional separation arrangements may be appropriate.[3] Specifically, it stated:[4]

   While some non-discrimination provisions are included in the NER for contestable connection services, as noted above opportunities for discrimination may still arise in determining the contestable components of a connection and the T&C's of the network operating agreement.

3. Various submissions to the AER's Issues Paper have claimed that additional ring-fencing measures are required on the basis that transmission network service providers (TNSPs) are able to discriminate, or harm competition, in the provision of contestable connection services.[5]

4. Subsequently, the AER has determined that it does not have the power to impose ring-fencing obligations between negotiated transmission services and other services.[6] Therefore, functional separation has not been extended to contestable transmission connection services. The AER, however, indicated it will consider submitting a rule change proposal to the Australian Energy Market Commission (AEMC) to give it the power to impose ring-fencing obligations on negotiated transmission services, with the apparent focus on contestable connection services.

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1 Ring-fencing refers to measures to segregate the regulated and contestable components of a service. The intention is to limit the potential for a vertically integrated monopoly service provider to gain an unfair advantage in a related contestable market through its owning or operating bottleneck facilities.

2 AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft, November 2022.

3 AER, 'Ring-fencing Guideline Electricity Transmission, Issues Paper', May 2022, p.29.

4 AER, 'Ring-fencing Guideline Electricity Transmission, Issues Paper', May 2022, p.29.

5 The AER summarises these submissions at: AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022, pp.31-33.

6 AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022, p.33.

1.2 Our findings

Summary of key findings

5. Our main findings are that:

   a. The AEMC's framework for transmission connections was carefully designed with a focus on ensuring TNSPs do not use their monopoly position to harm competitive outcomes.

   b. There are no obvious gaps in the regulatory framework that warrant more onerous ring-fencing measures to be imposed. Indeed, functional separation is likely to lead to worse outcomes for customers because this could see TNSPs exit the market for contestable connection services.

   c. No evidence was presented in submissions to the AER of gaps in the framework or actual outcomes that warrant more onerous ring-fencing arrangements.

6. The remainder of this section summarises our findings in more detail.

Nature of contestable connection regime

7. In a rule change process in 2017, and a further rule change process in 2021, the AEMC introduced contestability for certain connection assets within a substation that were previously a monopoly service ("individual user share assets" – IUSAs – where these are above a certain threshold),[7] and subsequently extended the regime in relation to large connection assets beyond the boundary of the substation (Designated Network Assets, or DNAs).[8] In both cases the assets are treated as part of the transmission network after they have been commissioned, meaning that the TNSP is responsible for their operation, maintenance, and control, and is the registered party in respect of the assets.[9]

8. As the assets will form part of the transmission network, and control will pass to the TNSP, certain additional measures are included:

   a. contestable IUSAs and DNAs are required to be designed and constructed according to a Functional Specification prepared by the TNSP, and

   b. where the owner is not the primary TNSP, the asset owner is required to enter into a network operating agreement with the TNSP that addresses, amongst other things, the payment to be made to the TNSP for operating and maintaining the asset.

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7 This threshold is currently set at $10 million.

8 The further class of connection assets are the small, dedicated connection assets beyond the substation (dedicated connection assets, or DCAs). These works have always been contestable, and they become part of the customer's facility if owned by the connected party.

9 We note that the arrangements in Victoria are different to the other NEM jurisdictions. This is because the Australian Energy Market Operator (AEMO) has declared network functions. This report focuses on arrangements outside of Victoria.

9. In addition, the TNSPs are required to provide IUSA assets that do not meet the threshold for contestability as a regulated service (specifically as a negotiated transmission service). Thus, there is a requirement for the TNSPs to maintain a capability to undertake projects that are identical to contestable projects within the regulated part of its business.

10. A deliberate design feature of the regime was that connection proponents were provided with the choice as to whether to pursue a competitive process for some or all of the contestable connection works, or to negotiate with the TNSP for the provision of these. This preserves the role of the TNSP as a provider of these contestable services.

Nature of the market for contestable connection works

11. There are a range of important features of the market for contestable connection services that are relevant to any analysis of the effectiveness of competition and the regulatory regime.

12. First, the parties that are likely to seek connection to the transmission network can all be assumed to be large and well-resourced entities. This means that it can safely be assumed that they will make themselves informed of their competitive or regulatory options, and pursue regulatory options (like commercial arbitration) where this makes sense. This is something that the AER has accepted as a feature in transmission when compared to distribution.[10] Therefore, we do not consider it to be a matter under dispute.

13. Secondly, the competition that emerges for connection services is for one-off, up-front activities – being the provision of an asset – rather than for an ongoing service.[11] A consequence of this is that the unit cost to a business from performing contestable activities on a stand-alone basis will depend on the predictability and stability of the workflow associated of these new, one-off projects. Where such projects are infrequent, or generate a lumpy work profile, then the commercial viability of provision of these services on a stand-alone basis may be brought into question. Despite the total volume of new generation that might be connected to the transmission network in a year, the number of new connection projects completed in each region may be relatively small.

14. Thirdly, much of the competition for contestable connection works is expected to come from distributors, TNSPs from other jurisdictions and large engineering firms. Each of these would retain a standing capability to bid for one-off contestable connection projects as a consequence of their other activities. There is no need for new competitors to set up and win contestable connection projects in a particular jurisdiction for competition for new contestable connection projects to be effective.[12] The enduring threat of competition

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10 See, for example: AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022, pp34-35

11 Therefore, the nature of competition is quite different to that of a retailer or generator where there is ongoing rivalry between entities.

12 Economic analyses of competition typically distinguish between the competition coming from existing competitors within a market, and the competition associated with the threat of new entry, with the strength of the latter depending on the ease with which new entry may occur. Our discussion here implies that, in the case of contestable connection projects, the existing competitors within the market

from other current market participants means that the threat of competition is sufficient to discipline the behaviour of TNSPs. Further, this threat of competition means that efficient outcomes can be expected even where incumbent TNSPs undertake the majority of contestable connection projects.

Assessment of the regulatory regime for contestable connections

15. The "gate keeper" role that TNSPs are required to perform may provide them with the opportunity to adversely affect competitors for contestable connections – and so reduce competition for these activities – if nothing more was done. Some stakeholders to the AER's review of the transmission ring-fencing guideline have expressed concern at this possibility and so the need for additional ring-fencing obligations to protect against anti-competitive behaviours.

16. However, in our view, the regulatory framework that the AEMC introduced as part of the rule changes discussed above, combined with the measures already in place,[13] provides a comprehensive framework to address the potential actions that a TNSP could take to reduce competition (referred to below as "harms" to competition). We do not think that there are any material gaps in this framework that may warrant more onerous measures being imposed. Indeed, more onerous measures, such as permanent functional segregation of staff between monopoly and contestable activities, would be more likely to reduce competition and act against the interests of customers.

17. We have analysed the key potential harms to competition for contestable connections that might emerge from the monopoly TNSP's role in the connection process, and assessed the effectiveness of the regulatory regime in responding to each harm. Our key conclusions are as follows:

    a. *Harm 1: TNSPs may shift costs from the provision of the contestable service to the regulated service in order to make it more price competitive in the contestable market* – we note that the AER is proposing changes to the ring-fencing guideline that have the effect of codifying how TNSPs already allocate costs between transmission and non-transmission services under the current guideline, and so no gap exists here.[14] The allocation of costs between contestable connection services and regulated transmission services is already regulated under Chapter 6A and established Cost Allocation Methodologies approved by the AER.

    b. *Harm 2: TNSPs may overstate the cost of operating and maintaining a IUSA or DNA* – the service in question is a negotiated transmission service, and so regulated in the same way as all such services. Key features of this regime include upfront negotiating

comprise all of the suppliers that have the current capacity by virtue of their work elsewhere to bid for a new contestable connection project, which is likely to include a large number of parties.

13 We note that the regulatory regime already included a highly codified process governing new connections (comprising a connection enquiry, response to the enquiry, preparation for the making of a connection offer, connection offer, and acceptance of the connection offer), that includes detailed specification of requirements on all parties at each step, including the information required to be provided and the timelines.

14 AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022, p.24.

obligations, principles to adhere to, transparency provisions (i.e., requirements to justify costs), and the opportunity for commercial arbitration about the terms and conditions of the service (including the price). We observe that the fact that customers are large and well-resourced means that the option of commercial arbitration is likely to apply an effective constraint to the pricing of this service.

c. *Harm 3: TNSPs could define the Functional Specification in a manner that imposed additional requirements on competitors or otherwise discriminate in its own favour* – in our view, there is limited opportunity for a TNSP to harm competition in the way the Functional Specification is defined, noting that:

   i. there is extensive technical information that is required to be published under S5.10 of the NER to inform prospective connecting parties

   ii. the transparency created through the requirement to provide a Functional Specification, which may be reviewed by an Independent Engineer, provides a substantial brake on the capacity to use technical requirements for anti-competitive purposes, and

   iii. the TNSP's own detailed design for an IUSA or DNA is also required to be consistent with the Functional Specification.

d. *Harm 4: TNSPs may use information gained in their role as a monopoly service provider that provides an advantage when bidding on contestable services* – the regulatory regime includes an explicit requirement to protect confidential information that is received during a connection process as part of the TNSP performing its "gate keeper" functions.[15] In addition, we observe that:

   i. the information that TNSPs receive during a connection process in relation to contestable connections is limited – for example, there is no requirement for them to get access to the pricing or other commercial details of a competitor's offer

   ii. whilst a TNSP may get some forewarning of an upcoming connection project through information received whilst performing its regulated activities, this is unlikely to provide a material competitive benefit – indeed, if a customer was considering running a contestable process for connection works, it would have a strong incentive to forewarn all potential bidders that it was considering running a tender (noting again that these are large and sophisticated parties),

   iii. TNSPs do not receive information about competing tenders during a connection process as they are only required to approve that the design meets the Functional Specification for the project, as well as providing an offer in relation

[15] In our view, the requirement for a TNSP to quarantine information that is received during a connection process has the effect of requiring a separation of key staff between those working on a contestable project, and those undertaking the "gate keeper" roles, whilst a contestable connection process is being run. However, once the contestable process has concluded, staff could be deployed to other activities, thus providing the opportunity to manage the potentially lumpy workstream associated with contestable connection projects.

to the cost of operating and maintaining the asset, following the receipt of the connection application, further

iv. the AER's proposed information controls within the draft Transmission Ring-fencing Guideline would limit information usage to its intended purpose and so would prevent this harm without the need to extend the scope of ring-fencing.

e. *Harm 5: TNSPs could use the conduct of the connection process itself to discriminate against customers that seek contestable connections* – as noted already above, the process by which TNSPs are required to assess and effect connections is highly prescribed in Chapter 5 of the Rules, which includes detailed requirements for all parties at each stage of the process, including the information to be provided and timelines. We think that, given the extent of the prescription of this process, there is little room left for TNSPs to seek to discriminate against a competitor for a contestable connection process.

18. We observe that some of the stakeholders' comments about the need for further regulation were based upon an incomplete understanding of the current regulatory requirements on TNPSs. We also note that where harms to competition were identified, these were largely theoretical and not supported by evidence of inappropriate behaviour or outcomes. Our view is that, when assessed in the context of the complete framework that applies to contestable connections, the concerns raised do not warrant the addition of substantial additional ring-fencing obligations on TNSPs. Moreover, to the extent stakeholders do identify gaps in the regime, we think it would be preferable for these to be addressed through changes to the regulatory framework in Chapter 5 of the Rules (through a rule change) given that this is where the majority of the protections of competition in relation to contestable connections reside.

2. Characteristics of the market for contestable transmission connection services

2.1 Introduction

19. The purpose of this chapter is to consider the model that exists for constestable connection services in the NEM and what that implies for the expected nature of competition.

2.2 The model for contestable transmission connections

20. Prior to 2017, network extensions beyond the boundary of the shared network were contestable, but other works – such as extensions to the shared network or works within a transmission substation – were exclusively undertaken by the primary TNSP. However, following the AEMC's review of the transmission planning and connections framework, and then further during a subsequent rule change process, a specific form of contestability was introduced in relation to:

    a. the provision of certain works that are caused by a connection that occurs within a transmission substation (referred to as an "Identified User Shared Asset", or IUSA) that exceed a pre-determined threshold,[16] and

    b. the extension of the transmission network where this could serve multiple connecting parties (referred to as a "Designated Network Asset", or DNA) that also exceed a pre-determined threshold.[17]

21. IUSA projects that fall below the pre-determined thresholds are to be constructed by the TNSP as a regulated project (specifically as a negotiated transmission service).[18]

22. There are two important components to the AEMC's contestability model that drove its design.

    a. First, the AEMC concluded that the long-term interests of customers would be maximised if the IUSAs and DNAs are operated as part of the primary TNSP's shared network, irrespective of who constructs the asset so to preserve the single point of accountability for transmission network outcomes. Accordingly, where one of these assets is constructed by a third party, there is a requirement for the responsibility for operating, maintenance, and control of the assets to pass to the TNSP once they are installed, and the TNSP becomes the registered party in relation to the assets.[19]

    b. Secondly, an important part of the scheme was to make contestability optional, at the choice of the customer. That is, a customer would have a choice of simply appointing

16 The threshold value, as specified in clause 5.3.3(5A) is $10 million.

17 The remaining type of asset – which is the dedicated connection asset between the shared network and a customer – is referred to as a "Dedicated Connection Asset" or DCA.

18 The threshold is $10 million and is specified in clauses 5.2A.4(b) and (c) of the NER,

19 AEMC, 'Transmission Connection and Planning Arrangements, Rule Determination, 23 May 2017, p.31.

the primary TNSP to undertake the non-contestable and contestable transmission works if it chooses, or to pursue a contestable process.

23. It is our view that the intention of the framework was that TNSPs remain the primary provider of connection services, but that customers can use the option of a third party provider to place a competitive discipline on TNSP's offers. This intent is reflected in the following quote, where the AEMC states that parties will be negotiating with the TNSP, but competition will place competitive pressure on TNSPs to improve their service offerings:[20]

Connecting parties' objective is to negotiate with the TNSP for the most efficient provision of services to enable their connection to the transmission network, while meeting their specified requirements. Competition in the provision of these services, where appropriate, could contribute to more efficient investment in and operation of these services. Competition should give connecting parties greater ability to manage the costs and timing of their connection, as well as placing competitive pressure on TNSPs to improve their service offerings.

24. It follows that, for IUSA and DNA assets, the contestability would be for the design and construction of the relevant assets, with the competitive process expected to provide a discipline over, amongst other things: the design of the asset, procurement of plant, management of works, return on investment sought by the asset provider and the commercial terms and conditions, including service standards and the allocation of risk. As the asset would be treated as part of the TNSP's transmission network after its construction, the subsequent performance of the asset would be governed by the same regulation that applies to the other parts of the TNSP's shared network.

25. The fact that the TNSP will take responsibility of the IUSA and DNA assets that are constructed by other parties and then operate and maintain them has given rise to two further aspects of the regime:

a. *Network operating agreement* – there is a requirement for the TNSP and provider of the asset to agree to the charging arrangements for operating and maintaining the asset over its life, as well as related operational matters, as these tasks will be the responsibility of the TNSP.[21]

b. *Approval of the network design* – there is a requirement for the TNSP to produce a Functional Specification for a IUSA or DNA, and then to approve that the design of the IUSA or DNA proposed by a tenderer complies with the functional specification. This process exists to confirm that the proposed assets are suitable for being part of the shared network.[22]

26. The role the TNSP is required to perform in the processes above may provide it with the opportunity to influence the cost of a competing project (including by potentially

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20 AEMC, 'Transmission Connection and Planning Arrangements, Rule Determination', 23 May 2017, p.29.

21 Clause 5.2.A2(5) of the NER.

22 Clause 5.7.8 of the NER.

disallowing a design). It also requires it to receive certain information following the conduct of a competitive tender (namely, the detailed designs of the successful tenderer[23]). As such, if nothing else was done, the potential exists for a TNSP to harm the competitive process to advantage itself as a potential competitor for the contestable project.

27. In response to the potential for a TNSP to disrupt competitive outcomes, the regime the AEMC created includes a number of measures that are directed to addressing the potential harms to competition directly. We discuss the nature of these harms, and the measures included in the contestable connections regime to address them, in further detail in chapter 3. First, however, we make some additional observations about the nature of the market within which this competition takes place that provides the important context for the assessment of harms and ameliorating measures.

2.3 Nature of the market for contestable transmission connections

2.3.1 Introduction

28. In this section we describe what we consider to be the key characteristics of the market for contestable connection services that guide expected outcomes and also influence the need, and feasibility of, certain protections for competition. The characteristics we discuss here are:

a. That competition is for one-off, up-front activities, rather than ongoing rivalry like exists for generators or retailers.

b. The threat of competition is effective in disciplining the behaviour of TNSPs, such that there is less need for analysis of the number and character of incumbents.

c. The counterparties to a connection agreement are well-resourced and sophisticated market participants, meaning they are able to critically assess price and terms and conditions as well as avail themselves of key aspects of the regulatory framework.

d. Information can provide a TNSP with a competitive advantage, however, in this case such information is limited and the framework aims to protect confidential information or ensure it is shared equally.

e. Customers have the option to draw on the efficiencies of the TNSP for the co-ordinated delivery of both contestable and non-contestable activities.

f. The economic characteristics for dedicated connection assets (DCA) are different given TNSPs are not required to operate these assets and they do not form part of the transmission network, removing any potential leverage in competing for such projects.

[23] It is important to note that TNSPs only see the detailed design of the successful tenderer and so do not see all tenders, and detailed designs, presented to the connection proponent.

2.3.2 Competition is for one-off, up-front activities

29. One feature of the market that emerges from the above discussion is that the competition for connection services refers to the competition for a one-off act – being the provision of an asset – rather than for the provision of an ongoing service. This follows because, once a competitive process for an IUSA or DNA has been concluded, a contract is concluded. That contract addresses any ongoing matters such as the payments made by the connecting party, and the operation and maintenance of the asset. Thus, the nature of the competitive activity can be contrasted with that of retailers or generators, where there is an ongoing rivalry between entities in providing a service.

30. One corollary of the fact that competition is for one-off activities (construction) is that the unit cost for a business that provides only the contestable services in question will depend critically on the predictability and stability of new, one-off projects. If contestable connection projects are infrequent, then provision on a stand-alone basis may be commercially unviable. This is because there would be material periods when staff are under-utilised, causing unit costs to increase. An implication of this is that the predictability and stability of work-flow would become a key driver of the likely cost of imposing restrictive and deep functional separation requirements in relation to contestable connections.

31. It is notable that when implementing the framework for contestable connections that the AEMC warned against the potential for detrimental outcomes if more restrictive ring-fencing obligations were imposed. It noted that this may impact on the ability and incentive for TNSPs to compete in the market for contestable connection services, and that this would likely affect the degree of competition for contestable connection services.[24]

    The final rule more explicitly defines which services provided in relation to a connection are to be provided as negotiated transmission services on an exclusive basis by the TNSP, and which can be provided on a contestable basis. These changes will therefore have an implication for a TNSP's compliance with the ring-fencing guidelines. While this is not a concern under the existing ring-fencing guideline, ***the Commission acknowledges that a more restrictive approach to ring-fencing for TNSPs may affect the ability and incentives for TNSPs to participate in a market for the provision of contestable connection services, and would likely affect the degree of competition for contestable services under the framework set out in this final determination. [Emphasis added]***

32. To this end, we note that the TNSPs have commented previously to the AEMC and the AER that transmission connection projects tend to be low volume, uncertain, but large, when they occur. This means that, while a substantial staffing requirement would be needed to participate in a tender when a project arose, there would be material periods of under-utilisation at other times. Further, the TNSPs have also commented that this is a substantial point of difference between transmission and distribution, with the latter

[24] AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.167.

experiencing a near constant flow of connection activities, with projects typically small scale. This observation is relevant when considering the cost of functional separation measures, which are discussed further in chapter 3.

2.3.3 Threat of competition is effective

33. Ordinarily when the conditions for competition are analysed in the energy sector, substantial weight is placed upon the number and character of the incumbents within the market and the capacity for new competitors to enter the market. This is because the barriers to entry[25] that exist for most parts of the energy sector imply that the threat of new entry may not provide a substantial discipline on price and quality.

34. New entry is not required for the threat of competition to be effective with respect to contestable transmission services. The most likely competitors in relation to contestable connections are DNSPs, TNSPs from other jurisdictions and large engineering firms (potentially teamed up with infrastructure investors). All of these parties are able to maintain an efficient scale through activities in other jurisdictions, or in other parts of the network. Even just taking account of only distributors and TNSPs operating in the NEM, it means that there are about 20 entities that are able to compete to provide a connection service at any time. This reality, combined with the one-off nature of competition, means that these parties compete on an even footing with a TNSP. Indeed, many of the potential competitors to the TNSPs are much larger than the TNSPs themselves.

35. An important consequence of the threat of competition being sufficient to constrain outcomes is that efficient outcomes can be expected even if the primary TNSP undertakes all, or the majority, of contestable connections in a region. Indeed, as we identified in section 2.2, it was a clear intent of the AEMC's framework that TNSPs would remain the dominant provider of contestable connection services but contestability would discipline the behaviour of the incumbent TNSPs.

2.3.4 Well-resourced and sophisticated customers

36. Customers that are directly connected to the transmission network tend to be large and sophisticated commercial entities. This is particularly the case in the context of electricity generators for whom the contestable connection arrangements are targeted. The nature of the parties connecting, therefore, is likely to mean they are able to critically assess offers from suppliers and also avail themselves of all aspects of the regulatory framework, such as commercial arbitration. Also, many of these are repeat customers that have established experience of the connection process. The presence of sophisticated and well-resourced customers tends to imply that less intrusive regulatory arrangements are required overall.

37. The AER has also acknowledged that the customers connected to the transmission network are different to distribution connected customers and this justifies a different approach to ring-fencing. Therefore, we do not consider this is a matter that is under dispute. For instance, in relation to the need for functional separation with respect to

[25] The principal barrier to entry for generation is that entry into the market necessitates a substantial sunk cost (i.e., irreversible investment) to be incurred.

branding and cross promotion the AER identified that the transmission connected customers are capable of addressing complex network and legal issues, stating:[26]

As noted in submissions, the profiles of transmission customers differ considerably from distribution customers. Generators and large customers seeking to connect to transmission networks are generally large, well-capitalised firms with their own regulatory and technical staff, capable of addressing complex network and legal issues. In contrast, customers accessing distribution services are typically residential or small business consumers that are more likely to be susceptible to, or confused by, shared branding and cross-promotions.

38. We note in the case of contestable connection arrangements that the AEMC implemented measures specifically targeted at strengthening the connecting party's negotiating power. Specifically, it stated the following:[27]

In addition, the final rule amends the existing process by which parties connect to the shared transmission network. The final rule seeks to strengthen a connecting party's negotiating power with a TNSP by:

- *requiring the Primary TNSP to publish certain information about connecting to its network on its website and provide certain information to connection applicants on request, to enhance the transparency of the connection process*
- *strengthening the principles that underpin negotiations for services required to connect to the shared transmission network and removing the requirement for TNSPs to develop individual negotiating frameworks for approval by the Australian Energy Regulator (AER)*
- *providing for a process by which an independent engineer can be engaged to provide advice on a technical issue related to a connection if either the connecting party or the TNSP requests it*
- *clarifying the process that applies to the resolution of disputes raised in relation to transmission connections.*

2.3.5 Very limited "electricity information" provides a competitive advantage

39. TNSPs receive, or are in possession of, substantial information as part of their regulated activities. Whilst the NEM rules result in much of the information being made public and available to all parties – which includes information on prospective new projects – there will be some information that is only available at any point in time to the TNSP. One example is that a TNSP may get early warning of a potential new connection application, which it receives as part of its normal activities discussing with customers the options for connection. The question that arises is whether receipt of this information will provide

[26] AER, ring fencing explanatory statement, pp.34-35.

[27] AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.iv.

the contestable arm of a TNSP with a competitive advantage if the customer chooses to connect and also opts to trigger the contestable process.

40. In our view, it is highly unlikely that advance warning of a possible future connection would provide a TNSP with an advantage, or at least that this need not be the case if customers are acting prudently. As noted above, a key feature of transmission connections is that all of the connecting parties are large entities that can be assumed to be well-informed. As was also discussed above, under the AEMC contestable connection arrangements, the customer has the choice of whether to pursue the contestable process or to negotiate with the TNSP to undertake all connection works. Under this arrangement, where the customer is considering pursuing a contestable process, it would be in its interest to provide advance warning to all possible competitors for a contestable connection that it may be seeking a tender in the near future to ensure that all parties have sufficient time to make a well-considered offer. Thus, if a customer is prudent in how it runs a tender process, then a TNSP should not receive any meaningful advantage through the possible advance warning of the project. Further, even in the absence of such advance warning to other tenderers, if the customer allows sufficient time for tender responses, any perceived or actual advantage a TNSP could gain through advance warning would be largely negated in any event.

41. As discussed earlier, however, if a competitive process is run, a TNSP would not receive information about competing tenders during a connection process as it is only required to approve that the design meets the Functional Specification for the project as well as providing an offer in relation to the cost of operating and maintaining the asset following receipt of the connection application. We discuss in detail the existing rules provisions that address the protection of this information in chapter 3. However, we observe here that the information the TNSPs receive is limited, and note that there is no requirement for TNSPs to receive information on the price that rivals offer,[28] or service aspects of a rival offer, or in fact any technical information from rival bids until after the tender process concludes.

2.3.6 AEMC model assumes coordination is possible between non-contestable and contestable activities

42. As discussed above, an inherent part of the AEMC's intentions in relation to contestable transmission projects was that a customer would have the option of simply negotiating with a TNSP to undertake contestable connection works, or to pursue a competitive process. Moreover, if the customer sought to negotiate with the TNSP, it would be open for a customer to inform itself as to the likely offers it would receive from competitors. This would provide the customer with the capacity to assess the reasonableness of offers, as well as providing some leverage given that the customer would retain the option of triggering the contestable process if it wished.

43. An implicit assumption in the "customer-optional-competition" model the AEMC produced was that a TNSP could deliver both the non-contestable and contestable

[28] Or, for that matter, the underlying cost estimates or assumed return on investment.

projects required for connection if this is what the customer wished.[29] Moreover, if this was the customer's choice, then it would be in the interests of the customer for the delivery of all projects to be coordinated and for all economies of scope to be realised. This, in turn, would require minimal restrictions on the flows of staff and resources within the TNSP.

44. In addition, it is noted that the TNSP would also be required to undertake projects that are otherwise identical to contestable projects on a regulated basis where those projects are below the threshold for contestability. This means that a TNSP must maintain a capability to deliver projects that are otherwise identical to contestable projects within its regulated activities. Again, the fact that similar projects may be either regulated or contestable is relevant to assessing the potential costs of requirements to segregate resources within the TNSP, which we address below.

2.3.7 No "leverage" in relation to a DCA project operation, maintenance, and control

45. The discussion above about the potential for a TNSP to harm competition has related to IUSA or DNA projects, where the TNSP will ultimately operate the project and must approve its design, and so has some leverage to influence competition (at least absent any measures to address this). We note here for completeness that a TNSP will not have the same leverage (or any meaningful leverage) over a DCA project as these assets can be operated and maintained by independent parties as their performance will not affect the shared network. A TNSP may, however, receive advance warning of these projects as part of its regulated activities although, as discussed above, this is unlikely to provide any meaningful competitive advantage.

46. We also note for completeness that a TNSP likewise would not have any leverage in relation to contestable transmission projects in jurisdictions in which it is not the primary TNSP, and nor will it have any leverage in relation to contestable distribution projects. Moreover, in relation to these latter classes of projects, a TNSP also would not receive any advance warning of a possible project through the performance of its primary TNSP role. This provides a further reason for the role of the TNSP as provider of contestable network services to be preserved in order to promote competition.

[29] Or, alternatively, the TNSP could deliver the non-contestable works and be appointed to deliver some of the contestable works (for example, the IUSA components), and a different party could be appointed to deliver the other works (such as the DCA component).

3. Potential harms to competition and the need for additional ring-fencing measures

3.1 Introduction

47. This chapter considers in further detail what harms to competition might exist where a TNSP, as a monopoly service provider, also participates in the market for contestable connection services. We then investigate whether the measures that the AEMC included in the Rules appear sufficient to protect against those harms occurring. In doing so we also consider the views made by stakeholders in submissions to the AER's review of the transmission ring-fencing guideline.

48. The potential harms to competition that could result from the monopoly TNSP participating in the market for contestable connection services that we discuss in this chapter are:

a. cost shifting to the regulated business to make the TNSP's competitive offer more price competitive

b. charging a price for operating and maintenance costs for an IUSA or DNA that is above the cost of supply with the aim of increasing the total cost of a competitor's offer

c. in the Functional Specification for a contestable connection asset, imposing technical obligations on competitors that a TNSP does not apply to itself, or obligations in a TNSP's favour

d. using confidential information obtained under a TNSP's regulatory functions to give it an advantage in the provision of contestable connection services, and

e. the conduct of the TNSP during connection process discriminates against competitors, for instance, by delaying processes.

49. In summary, it is our conclusion that the arrangements the AEMC imposed for contestable connection services, in addition to provisions that already existed, are adequate to address each of the potential harms to competition that we have identified. The framework provides the appropriate balance between addressing the harm and avoiding a situation where the costs of regulation outweigh the benefits. To that end, it is our opinion that more onerous arrangements, in particular functional separation, would not deliver benefits that would outweigh the costs. This is particularly the case given the arrangements already imposed by the AEMC would, in our view, require TNSPs to implement targeted, and time limited, quarantining of staff to restrict the use of any information it receives in the provision of non-contestable services when tendering for contestable services. To that end, the additional ring-fencing measures proposed by the AER in its draft Transmission Ring-fencing Guideline (such as with respect to the protection of confidential information and compliance reporting) appear proportionate and so should support the effectiveness of the AEMC's framework.

3.2 Cost shifting to the regulated business

3.2.1 Potential harm

50. When competing to provide a contestable connection service a concern might be that the TNSP shifts costs from the provision of the contestable service to the regulated service. The purpose of this would be to make the TNSP's offer more price competitive by having regulated customers subsidise the TNSPs competitive market offer. The effect would be to raise the price of regulated activities above the efficient costs of supply, and the price of the contestable service below the cost of supply.

51. Several submissions to the AER's review of the transmission ring-fencing arrangements identified a need to ensure that costs are properly separated between regulated and unregulated services based on a concern about cost-shifting and the ability for TNSPs to subsidise competitive offers through the regulated business.[30] For instance, Jemena stated that customers should be able to benefit from competitive tensions without other customers potentially cross-subsidising solutions.[31]

52. Relatedly, two submissions to the AER identified a potential issue with TNSPs bundling regulated and unregulated services into a single offer.[32] Clause 5.3.6(b)(2) explicitly requires that the offer to connect includes an un-bundled price and so we do not discuss that potential harm further.[33] Given this explicit treatment in the Rules we do not consider this matter in detail below.

3.2.2 Assessment of the current arrangements

53. Measures focused on addressing cost shifting should aim to ensure that costs are properly allocated to those activities that incur the cost. Additional measures would be required to verify costs are actually allocated correctly.

54. It is our view that the current arrangements are well targeted to limit the ability for TNSPs to shift costs between regulated and contestable services. This is a view that the AER is likely to agree with. We say this because the AER's main change with respect to cost allocation was simply to codify existing practice.

55. The main elements that protect against cost shifting are as follows:

    a. Cost allocation obligations that expressly prohibit TNSPs allocating costs to prescribed transmission services that are not directly attributable to that service.[34] As indicated above, the AER is also proposing that the TRFG codify current practice

30 Jemena Submission p.2, AEO Submission, p.5, CitiPower Submission, p.3.
31 Jemena Submission, p.2
32 AEO Submission, p.5, Jemena Submission, p.2.
33 Specifically, clause 5.3.6(b4)(2) states: the costs of the services proposed to be provided by the *Primary Transmission Network Service Provider* separated between *negotiated transmission services* and *non-regulated transmission services* (if applicable).
34 Clause 6A.19.2 of the NER.

whereby costs are allocated between transmission and non-transmission services.[35] These arrangements operate within a prescriptive framework whereby the Cost Allocation Methodology that the TNSP applies is required to be consistent with the Cost Allocation Principles in the NER and is approved by the AER in accordance with its Cost Allocation Guidelines.

b. Reporting and accounting requirements that make it possible for the AER to reveal where costs are allocated to regulated services instead of non-regulated services. Specifically, section 28F of the National Electricity Law permits the AER to obtain whatever information it considers is necessary for it to exercise its functions or powers. Chapter 6A of the NER also provides the AER with the power to develop information guidelines setting out the information TNSPs are to provide on an annual basis. Clause 6A.17.1(d) of the NER, in particular, specifies the information the AER is able to collect may be for enforcing compliance with a TNSP's Cost Allocation Methodology.

    i. Relatedly, the AER's Electricity Transmission Information Guideline requires that an audit be performed and accompany the submission of a TNSP's regulatory information. This includes auditing the basis and application of the cost allocation methodology.[36]

56. Based on the obligation to allocate costs in this way, and the absence of evidence presented that TNSPs have allocated costs inappropriately, it is not clear to us that the concerns raised by stakeholders to the AER hold much substance. This is consistent with the AER not identifying any material gaps in the framework as part of its review of the transmission ring-fencing guideline. If the updates to the TRFG add transparency to the behaviour of TNSPs, which the AER has said its proposed updates achieve,[37] this may assist in alleviating stakeholder concerns in this area.

3.3 Charging a high price for an O&M service

3.3.1 Potential harm

57. Under the framework established by the AEMC for connection services, TNSPs are required to provide the O&M service associated with any third party IUSA or DNA in accordance with a network operating agreement.[38] This is because the asset still forms part of the TNSP's broader transmission system and third party operation and maintenance would impose material risks on TNSPs given they maintain accountability for transmission network outcomes..

35 AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022, p.24.

36 AER, 'Final, Electricity Transmission Network Service Providers Information Guideline, Version 2', April 2015, p.9.

37 AER, 'Electricity transmission Ring-fencing Guideline, Explanatory Statement – Version 4, Draft', November 2022 p.23.

38 Clause 5.2A.7(a) and 5.2A.7(d) of the NER.

58. The potential harm to competition that might emerge from the requirement to provide the O&M service is that the price included in the network operating agreement to perform O&M tasks may discriminate against third party providers. That is, it imposes a price that is above the efficient costs incurred by the TNSP to provide the service. The TNSP might do this in order to discourage the use of third party providers given it would increase the overall cost of that option.

59. Several submissions to the AER raised a concern about the capability for TNSPs to discriminate in terms of price for regulated services.[39] AEO, for example, stated that full functional separation is needed to prevent TNSPs imposing advantages to an affiliate in terms of the price and terms and conditions associated with the operation and maintenance of an IUSA.[40] It also proposed the use of pro-forma contracts for regulated works to remove the risk of discrimination.

3.3.2 Assessment of the current arrangements

60. The main objective for measures targeting the price of the O&M service is to ensure that the price reflects the cost of supply. Further, the price should not be different between parties except to the extent that there is a difference in the cost (i.e. there should not be inefficient discrimination in prices between parties).

61. It is our view that the arrangements in the NER are well targeted and so should provide confidence to market participants that the price of the O&M service is fair and reasonable. The framework includes a combination of:

    a. upfront obligations

    b. principles to adhere to

    c. transparency provisions, and

    d. the opportunity for commercial arbitration should a dispute arise.

62. Practically, TNSPs would be compelled to provide the O&M service on a consistent basis between third parties and its on contestable assets given fixed prices would be extremely hard to estimate such that pass-through arrangements are most likely.

63. Further, we think that there are no obvious additional measures that could be imposed to provide further confidence about the price for the O&M service. For instance, functional separation would not provide any additional benefit given it does not directly target how the price for regulated services is set. While the full regulation of prices would see the costs of regulation outweigh the benefits given the economic characteristics of the service.[41] A full regulation option may also increase risks for TNSPs given the O&M

39 Jemena Submission, p.2, Iberdrolla Submission, p.4, CitiPower Submission, p.3, AEO Submission, p.5

40 AEO Submission, p.5

41 These economic characteristics are that the customers are highly sophisticated and the service can be directly attributed to a particular customer. These economic characteristics, amongst others, are the reason the decision was made that the costs of full regulation would outweigh the benefits with respect to negotiated transmission services.

function is performed on assets designed and built by other parties, and so may involve costs and risks that are less observable to a regulator. Also, as noted above, it is extremely difficult for a TNSP, let alone a regulator, to derive a fixed price for O&M services. In any event, customers in this case are likely to prefer negotiation compared to full regulation given the flexibility this permits.

64. Given the regime that is in place, it is our opinion that the views in submissions that TNSPs are able to discriminate in terms of price are not well founded. Further, they do not appear to have fully taken into account all the elements of the current framework and so the protections that already exist. We note that submissions seemed to raise only generic concerns in this respect and so did not identify specific issues with the framework that would permit discriminatory pricing Regarding AEO's view that there should be pro-forma contracts to remove the risk of discrimination, as we identify in section 3.5.2, TNSPs are already required to produce standard form agreements. This includes standard network operating agreements and standard connection agreements.

65. In the remainder of this section we detail the key protections that exist in the NER with respect to a TNSP inefficiently pricing the O&M service for a third party IUSA or DNA.

Negotiating framework

66. The framework includes several measures focused on how TNSPs negotiate the price for the O&M service. These measures sit on top of a general requirement to negotiate in good faith and offer fair and reasonable terms.[42] Specifically, negotiations are to be done in a manner consistent with general negotiating principles, as well as specific negotiating principles for network support agreements, contained in the NER.

67. The negotiating principles for negotiated transmission services in the Rules apply to all negotiated transmission services except for DNA services, where separate principles apply.[43] There are two principles that are particularly relevant with respect to the pricing of the O&M negotiating service, namely:

    a. Schedule 5.11(1) requires that the price for a negotiated transmission service should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the Cost Allocation Methodology.[44] A price above the cost of supply, or where costs are not properly allocated – and so discriminated against competitors – would be in breach of this requirement.

    b. Schedule 5.11(5) requires that the price for a negotiated transmission service must be the same for all transmission network users unless there is a material difference in costs. This principle limits the ability for TNSPs to discriminate because it would limit TNSPs setting different O&M prices for generators that choose the TNSP versus those that choose third parties (unless there is a material difference in costs).

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42 Clause 5.3.6(f) of the NER.

43 The negotiating principles for a DNA service are contained in schedule 5.12 of the NER and give recognition to DNA being shared across multiple connecting parties.

44 Schedule 5.11(1) of the NER.

68. In addition to the general principles, there are specific negotiating principles targeted to connection services. Specific negotiating principles for connection services are contained in clause 5.2A.6 and go mostly to information provision and transparency. Therefore, these are addressed in the next section. In terms of the negotiating principles in schedule 5.11 of the NER, the most relevant to this issue is schedule 5.11(11). This principle requires that the price reflect the cost directly incurred as a result of a connection. This principle, set out below, therefore supports the principle of cost based prices in Schedule 5.11(1):

The Connection Applicant should only be required to pay the costs directly incurred as a result of its connection, including its share of costs associated with an identified user shared asset.

Transparency obligations

69. There is an information asymmetry issue associated with the question of whether a price reflects the cost of supply. That is, it is difficult for third parties, or transmission users, to know what the actual efficient cost of supply is. Transparency provisions in the Rules aim to address this by requiring that TNSPs provide connecting parties with relevant information. Connecting parties can then seek expert advice to test the information provided by TNSPs through this process. As indicated above, the negotiating principles contained in clause 5.2A.6 are focused on information provision and transparency.

70. The negotiating principles contained in 5.2A.6 require TNSPs to provide certain information on request. This includes informing a connection applicant of the reasonable costs of providing a negotiated transmission service and demonstrating that the proposed charges reflect the costs of supply. Specifically, the clause 5.2A.6(b) of the NER states the following:

(b) A Transmission Network Service Provider must, in accordance with the negotiating principles:

(1) on request, identify and inform a Connection Applicant of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing a negotiated transmission service;

(2) on request, demonstrate to a Connection Applicant that the charges for providing a negotiated transmission service reflect those costs and/or the cost increment or decrement (as appropriate);

(3) determine the potential impact on other Transmission Network Users of the provision of a negotiated transmission service; and

(4) notify and consult with any affected Transmission Network Users and ensure that the provision of a negotiated transmission service does not result in non-compliance with obligations in relation to other Transmission Network Users under the Rules.

71. In addition to these negotiating principles, in response to a connection enquiry, clause 5.3.3(b)(10) of the NER requires TNSPs to provide indicative costs for the O&M service

for a IUSA or DNA based on the Functional Specification. It is our view that this information would provide a focal point for the final pricing arrangements of the O&M service such that any material change from it would need to be well justified. Further, the requirement that the estimate be based on the Functional Specification is important. If a TNSP competes to provide a contestable connection service, it would be required to apply the same Functional Specification to itself as it applies to all others. Therefore, this would serve to tie the TNSP to its indicative estimate of the O&M cost for the Functional Specification and so constrain the prospects of price discrimination.

Commercial arbitration

72. Due to the O&M service being a negotiated transmission service, the commercial arbitration arrangements for negotiated transmission services and DNA services in Rule 5.5 of the NER apply. The commercial arbitration framework is intended to be a cost and time efficient process to obtain an expert determination when a dispute over price or the terms and conditions of a negotiated transmission service arises. Specifically, when establishing the commercial arbitration regime the AEMC stated the following:[45]

The Revenue Rule provides for the AER to refer matters of dispute regarding the price of negotiated transmission services to an independent commercial arbitrator who is required by the Rules to make a decision within 30 days. The Commission maintains the view that it is important that the arbitrator be skilled in dispute resolution techniques and have regard to the negotiation framework/criteria set out by the AER in the relevant Revenue Determination. However, considering the commercial nature of these negotiations and with an interest in maintaining a timely arbitration process, the Commission has retained the use of commercial arbitrators given their skill in commercial dispute resolution and likely proficiency in resolving disputes within the required 30 day timeframe. In addition, it ensures that the costs of arbitration are [sic] *remain with the negotiating parties.*

73. Under the commercial arbitration framework, if a connecting party believes that the cost for the O&M service does not reflect the cost of supply, or any of the other negotiating principles, it is able to seek an independent determination on the price from a commercial arbitrator. The commercial arbitrator for a dispute over the O&M price is required to apply all of the negotiating principles that are applicable to the dispute.

3.4 Discrimination in relation to the Functional Specification

3.4.1 Potential harm

74. The Primary TNSP is required to specify the Functional Specification for a connection.[46] The Functional Specification sets the technical parameters for the assets' design.[47] A potential harm to competition in this case would be where a TNSP set the requirements

45 AEMC, 'Rule Determination, National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006, No.18', 16 November 2006, pp.41-42.

46 Clause 5.3.3.(b)(9) of the NER.

47 For instance, equipment ratings, preferred equipment, voltage of connection and protection systems, and substation parameters.

of the Functional Specification above what it would impose on itself. The effect would be to impose a cost onto a TNSP's competitors that it does not impose on itself. Alternatively, the TNSP could design a Functional Specification that is biased in its own favour.

75. Several of the submissions to the AER's review of transmission ring-fencing commented on the ability for TNSPs to provide themselves with favourable technical obligations versus what third parties would be required to adhere to. For example, Iberdrola commented that when connecting batteries TNSPs could favour their affiliates with respect to technical arrangements. Tilt also raised a concern that TNSPs could relax technical requirements for its own projects.[48]

3.4.2 Assessment of the current arrangements

76. The desired outcome for measures focused on the Functional Specification is an assurance that the technical obligations for a TNSP supplied connection service match those imposed on third parties. Further, any measures need to ensure that the technical obligations are not biased in favour of the TNSP.

77. It is our opinion that the protections in the Rules associated with the Functional Specification are appropriate and should provide market participants with confidence that TNSPs are not discriminating in their favour with respect to the provision of contestable connection services. The key measures that achieve this are:

a. A requirement that a TNSP's detailed design for an IUSA or DNA is consistent with the Functional Specification that was provided in the response to a connection enquiry, and

b. The option for an independent assessment of the Functional Specification by an Independent Engineer.

78. Given the TNSP has to adhere to the same Functional Specification as third parties, and there is recourse to an Independent Engineer if there is a perception of bias in the Functional Specification, it is not clear to us where the concerns from stakeholders commenting to the AER emerge from. We note in this respect that stakeholders did not identify specific gaps in the current framework or provide any evidence of such outcomes occurring. Further, we are not aware of any party requesting the Independent Engineer to advise on technical parameters. Instead stakeholders simply asserted that TNSPs could provide themselves with preferential technical parameters.

79. Clause 5.3.4(b1) requires that the TNSP's detailed design for an IUSA or DNA be consistent with the Functional Specification. As a consequence, irrespective of whether it is the TNSP or another third party that is successful in the tender for the detailed design of an IUSA or DNA, the detailed design must be consistent with the Functional Specification. Therefore, a TNSP cannot design to a more favourable Functional Specification for its own use. While we discuss the Independent Engineer next, we note

[48] Iberdrola Submission, p.4, Tilt Submission, p.2.

that whether the detailed design is consistent with the Functional Specification is a matter that parties can request the Independent Engineer to advise on.

80. Rule 5.4 of the NER sets out the arrangements for the use of an Independent Engineer with respect to the Functional Specification. The Independent Engineer is available to provide technical advice in relation to the following matters:

a. whether the detailed design of an IUSA or DNA meets the Functional Specification,

b. whether assets are dedicated connection assets or IUSAs, and

c. technical issues associated with the provision of negotiated transmission services.

81. This means that the Independent Engineer can advise on whether the Functional Specification is over-specified and, as identified above, if the detailed design of the TNSP is consistent with the Functional Specification.

82. In relation to the benefits of the Independent Engineer, the AEMC highlighted that it provides parties with a timely and cost-effective means of seeking independent advice on technical matters, stating:[49]

The independent engineer framework provides parties with a timely and cost-effective mechanism for seeking advice on technical issues relating to a connection. The Commission has received feedback from numerous stakeholders that the introduction of an independent engineer will assist with resolving these technical issues.

3.5 Use of confidential information for bids on contestable services

3.5.1 Potential harm

83. As indicated in chapter 1, TNSPs in their role as provider of prescribed transmission services can have access to information that is beneficial when bidding for contestable connection services. This might be information about the network or confidential information provided by the connecting party. If a TNSP used information that is not available to other parties when making connection offers, it would potentially provide itself with a material benefit.

84. Submissions to the AER's review of the transmission ring-fencing guideline took the view that functional separation was required to address the potential harms associated with the use of confidential information. AGL, for instance, identified the need for equal access to information to reduce barriers to entry in the market.[50] CitiPower stated that to prevent the sharing of information that leads to anti-competitive practices the separation of staff and offices is a necessary step.[51]

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49 AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.189.

50 AGL Submission, p.2.

51 CitiPower Submission, p.3.

3.5.2 Assessment of the current arrangements

85. Limiting the capacity for TNSPs to use information to achieve a competitive advantage requires measures that:

    a. ensure competitors have access to any relevant information that a TNSP has, while also ensuring that

    b. the TNSP is not able to use any confidential information that is provided to it to give it an advantage when making a connection offer.

86. It is our opinion that the framework imposed by the AEMC for contestable connections includes comprehensive measures to constrain TNSPs using information as an advantage when making competitive offers. The main features that limit harms from the use of confidential information include:

    a. the protection of relevant confidential information obtained by the TNSP

    b. TNSPs not having any access to competitor prices or financial information, which is arguably the most crucial information, and

    c. obligations for TNSPs to publish, or provide upon request, information that might be relevant to making a connection offer.

87. Given these arrangements, it is our view that the claims made by stakeholders to the AER have limited basis. TNSPs either do not have access to the most important information that provide an advantage when competing, namely commercial information, or are expressly precluded from using any other beneficial information obtained in providing prescribed transmission services. Further, the requirement to publish extensive information, or provide it upon request, means that the scope of information that a TNSP retains that is not available to its competitors is very limited. Again, stakeholders did not identify specific examples of information that they do not have access to, or what information the TNSP has that provides it with a competitive advantage. It is our view that the absence any evidence that the current framework is not achieving the desired aims indicates that additional obligations on TNSPs, such as functional separation, are not warranted.

Box 1: Functional separation for network connection services

As noted above, various stakeholders to the AER's ring-fencing guideline review have advocated for functional separation between negotiated transmission services and connection services as a means of limiting the misuse of confidential information. Indeed, the AER appears to be sympathetic to this approach, but noted it does not have the power to impose functional separation between negotiated transmission services and other services.

It is our view that the current framework, and specifically clause 5.3.8(a1) of the NER – which is focused on the protection of confidential information – would require a form of functional separation by TNSPs. This would be in the form of specific staff being quarantined for a temporary

period of time, namely, until the confidential information can no longer be used to derive a competitive advantage.

The time-limited functional separation that appears necessary given the clause 5.3.8(a1) requirement has the benefit of being consistent with the nature of competition for the market and also the AEMC's intended operation of the contestable connections framework. This is because:

- it matches the 'one-off' nature of competition described above given staff can be brought back to undertake regulatory functions when not needed for contestable connections, and
- it does not disrupt the ability for the TNSP to provide both regulated and contestable connection services given it is targeted to specific, potentially harmful, information.

Conversely, a permanent and broader functional separation of the sought desired by some stakeholders would mean that for a TNSP to meet its regulatory obligations, as well as compete for contestable connection services, TNSPs would need to create two separate permanent teams to undertake the same tasks. We understand that some TNSPs have identified that a separate team for contestable connection projects may not be feasible given the lumpy workflow of those projects and the need to ensure resources are available to perform the regulatory functions they are obliged to perform in relation to connections.

On this matter we echo the view we highlighted previously from the AEMC that if TNSPs were to depart the market for contestable connection services due to onerous ring-fencing obligations this would lead to worse outcomes for customers.[52] This is because an experienced and cost efficient competitor would no longer be available for customers to choose.

88. In the remainder of this section we step through the measures that exist with respect to the use of confidential information.

Protection of confidential information

89. Clause 5.3.8(a1) of the NER restricts the ability for TNSPs to use information it receives about contestable connection designs when making a connection offer. This is an added layer of protection in addition to requirements for TNSPs to protect confidential information. The key feature of the clause is that it prevents a TNSP from using any data or information provided to it in its role as the Primary TNSP when tendering for, or negotiating, contestable connection services. The clause is drafted as follows:

    The data and information provided to a Primary Transmission Network Service Provider in relation to its provision of non-contestable services as specified under clause 5.2A.4(a) must not be used by the Primary Transmission Network Service Provider for the purpose of tendering for, or negotiating, contestable services specified under clause 5.2A.4(a) in the connection process in which the data or information was given, or in future connection processes, without the consent of the Connection Applicant.

90. It is our opinion that the clause is focused on the designs that might be prepared by a third party. This is because there is limited other information that would be provided to a

[52] AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.167.

TNSP by connecting parties or a third party that would give a TNSP an advantage when tendering for contestable connection services.[53] As indicated above, it is our view that to comply with this obligation TNSPs would need to quarantine staff involved in preparing and negotiating a contestable tender from staff that provided regulated services. The purpose of the temporary quarantine of staff would be to provide confidence to market participants that the TNSP will not use any confidential information it receives to gain a benefit when negotiating a contestable connection service. Therefore, it would make sense for TNSPs to document their protocols in this respect and communicate the arrangement to potential connecting parties.

91. As noted above, a general confidentiality provision also exists with respect to connections. This is contained in clause 5.3.8.(a) and states the following:

(a) The data and information provided under rules 5.2A, 5.3 and 5.3A is confidential information and must:

(1) be prepared, given and used in good faith; and

(2) not be disclosed or made available by the recipient to a third party except as set out in rule 3.7F, clause 3.13.3, this clause 5.3.8 or in accordance with rule 8.6.

92. We note also that the AER is proposing enhancements to the protection of confidential information in the TRFG.[54] These largely mimic the existing arrangements in distribution.

Access to confidential commercial or pricing information

93. Arguably, the information most valuable to a TNSP would be the commercial and pricing features of a competitor's offer. For instance, a competitor's offer price or the rate of return. Knowing this information would permit pricing superior to a competitor's offer. However, this is information that is not available to the TNSP and so TNSPs have no competitive advantage in this respect.

Information held by the TNSP

94. As indicated above, a TNSP will have substantial information available to it through its main function as the primary TNSP for a jurisdiction. This is information it obtains, and needs, in order to operate the shared transmission network. It might also include information about how it will implement its regulated functions in relation to a network connection. To ensure a level playing field, the AEMC's framework for contestable connections requires TNSPs to publish information relevant to a connection, or make it available upon request.[55] In making its decision the AEMC took the view that the additional information requirements it imposed would improve the connections

53 As noted above, TNSPs do not have access to any commercial information related to the price of contestable connection services offered by third parties.

54 Section 4.2 of the Draft Transmission Ring-fencing Guideline.

55 This information is set out in detail below.

framework, not least by ensuring market participants have a better understanding of the connections framework:[56]

The Commission considered that amending the NER to introduce additional transparency requirements will improve the connections framework. The information provided by Primary TNSPs to parties intending to connect to the transmission network will increase both prior to the connection enquiry being submitted and during negotiations.

The Commission also considered that increasing the information available to all market participants will improve an understanding of the connections framework and so promote more efficient decisions being made by both established and new market participants.

The increased transparency requirements provide connecting parties with more information available upfront as well as access to information through a direct enquiry to the Primary TNSP. Under the final rule, the transparency requirements only apply to Primary TNSPs.

95. The framework imposed by the AEMC requires TNSPs to provide information in relation to the following areas:

a. the technical specification of IUSAs and DNAs, including typical primary plan and design standards

b. operating and maintenance arrangements, including typical schedules for this work

c. timescales, including for easement acquisition and commissioning

d. additional information in annual planning reports, such as specific details on constraints and how forecasts were developed, and

e. legal arrangements, such as standard connection agreements and network operating agreements, and

f. financial arrangements related to the amount and terms of the connection enquiry and connection application charge.

96. Schedule 5.10 of the NER includes a table of the information that TNSPs are required to provide. In addition to identifying what information is to be provided it also specifies how the information is to be provided and gives guidance on what that information should contain.

[56] AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.209.

Table 1: Information requirements of schedule 5.10 of the NER

Information	Via website or direct enquiry	Additional fee[1]	Comments
Technical specification			
Generic interface works	Website	No	Typical standards and layouts must be published. This information: (a) may be generic but should provide a high level overview of the components of a *connection*; and (b) must provide *Connection Applicants* with a high level understanding of what a *connection* consists of. *Primary Transmission Network Service Providers* must provide the design standards which are specific to their *network*.
Generic substation layouts	Website	No	
Typical overhead line structures	Website	No	
Typical underground cable arrangements	Website	No	
Typical primary plant	Website	No	
Design standards	Website	No	
Typical secondary systems	Website	No	
Detailed technical requirements for a particular *connection*	Direct enquiry	No	Functional specification to describe the requirements that must be met by the detailed design. The functional specifications must include: (a) description of any proposed *augmentation*; and (b) references to typical plant including primary and secondary equipment so that the detailed design will interface to the existing *network* and be able to be adopted by the *Primary Transmission Network Service Provider*.
Operation and maintenance			
Typical operation and maintenance scheduling	Website	No	Operation and maintenance intervals for specific items of *plant* used regularly by the *Primary Transmission Network Service Provider* must be published. These

Information	Via website or direct enquiry	Additional fee[1]	Comments
			are routine activities irrespective of whether assets are unregulated or regulated and should be in line with *good electricity industry practice*.
Timescales			
Easement acquisition (site specific)	Direct enquiry	Yes	Site specific timescales may be discussed and negotiated on a project by project basis as part of the *connection enquiry* / *connection application* process if the *Connection Applicant* requests it at their election.
Commissioning (generic)	Website	No	Generic timescales must be published.
Commissioning (site specific)	Direct enquiry	Yes	Site specific timescales may be provided as part of the *connection enquiry* / *connection application* process if the *Connection Applicant* requests it at their election.
Legal			
Standard connection agreements	Website	No	Standard forms of these agreements and deeds to be published. The standard form construction agreement must cover the construction of any interface works. The standard form *connection agreement* must cover the *connection* of the asset to the *transmission* network. The standard form *network operating agreement* must cover those aspects referred to in clause 5.2.7(b).
Standard network operating agreement	Website	No	
Standard interface works construction agreements	Website	No	
Standard relocation deeds	Website	No	
Environmental approvals (generic)	Website	No	Standard forms or lists of required approvals must be published. Site specific information may be provided as part of the *connection enquiry* / *connection application* process if *Connection Applicant* requests it at their election.
Environmental approvals (site specific)	Direct enquiry	Yes	
Development approvals (generic)	Website	No	

Information	Via website or direct enquiry	Additional fee[1]	Comments
Development approvals (site specific)	Direct enquiry	Yes	
Financial			
Amount and terms and conditions of the connection application charge[2]	Website	No	A guide to the structure of the application fee under clause 5.3.4, and the terms and conditions under which the charge is paid, must be published.
Relocation of existing assets	Direct enquiry	Yes	Specific information about relocation of existing assets may be provided by the *Primary Transmission Network Service Provider*, if the *Connection Applicant* requests it at their election. The *Connection Applicant* would be required to pay for any costs associated with the relocation of assets.

3.6 Conduct of the connection process is used to discriminate

3.6.1 Potential harm

97. Multiple steps are required in order to finalise a connection process. If connecting parties had a concern that TNSPs may hold up the connection process when a third party is used to provide certain connection assets this may discourage them from seeking a competitive alternative to the TNSP. TNSPs would do this by delaying how long they take to perform certain steps in the connection process.

98. Submissions to the AER's review of the transmission ring-fencing guideline expressed a general concern with the ability for TNSPs to discriminate in how they undertake connection processes. Tilt, for instance, considered TNSPs might expedite their own process compared to third party processes.[57]

3.6.2 Assessment of the current arrangements

99. The primary measure to address procedural conduct is obliging key tasks to be undertaken within set timeframes so that the capacity to delay a process is constrained.

100. It is our view that comprehensive arrangements exist to protect against TNSPs delaying work related to the third party provision of connection services. The AEMC included

[57] Tilt Submission, p.2.

prescriptive procedural requirements on TNSPs and also set timeframes for tasks to be completed at key milestones. Therefore, it our view that stakeholder's views about the capacity for TNSPs to delay a connection process do not align with our understanding of the regulatory framework.

101. Rule 5.3 sets out the majority of the relevant procedures and associated timeframes that occur for a connection process. More specifically, the timeframe contained in an offer to connect is to be the timeframe that was specified in the preliminary program provided as a response to a connection enquiry.[58] This timeframe is developed before a connecting party has chosen if it will use the TNSP or not for contestable services.

102. The AEMC was specifically focused on the prospect of TNSP's holding up a third party provision of connection assets in the design of the framework. It indicated that it included prescriptive procedural requirements on TNSPs and also set timeframes where appropriate. Specifically, on this matter, the AEMC stated the following:[59]

Under this model there is a risk that the Primary TNSP will delay or otherwise inhibit a party's connection if its bid to provide non-regulated transmission services to that party was unsuccessful. As such, connecting parties may be pressured into awarding the contract to the Primary TNSP, which would undermine the benefits of competition.

However, the Commission expected that such a scenario is unlikely to eventuate in practice. The final rule puts in place a set of revised negotiating principles to bolster a connecting party's bargaining power in negotiating the timeliness, cost and technical requirements of a connection. The final rule also sets out a fairly prescriptive connection process that requires the TNSP to provide a range of information (such as the functional specification) within set timeframes. Further, parties will have the ability to request the engagement of an independent engineer to provide advice on the technical aspects of a connection.

[58] Clause 5.3.6(1) of the NER.

[59] AEMC, 'Rule Determination, National Electricity Amendment (Transmission Connection and Planning Arrangements) Rule 2017', 23 May 2017, p.182.