

10 October 2012

Mr John Pierce Chairman Australian Energy Market Commission Level 5, 201 Elizabeth Street Sydney NSW 2000

Via website: www.aemc.gov.au

Dear John

# Transmission Frameworks Review Second Interim Report – Reference EPR0019

Grid Australia welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (the AEMC) Second Interim Report for the Transmission Frameworks Review (TFR). As the AEMC is aware, Grid Australia represents the owners of all major electricity transmission networks in the National Electricity Market (NEM). As a result, its members have a direct and substantial interest in the matters addressed in the TFR.

In summary, Grid Australia makes the following comments on each of the key aspects of the Second Interim Report:

# Generator access

Grid Australia recognises the potential benefits of the optional firm access model proposed by the AEMC and, therefore, supports its further development. However, to date the model has been developed at a conceptual level only. Therefore, the AEMC is encouraged to focus its recommendations to the Standing Council on Energy and Resources (SCER) on the work plan that would be required to further investigate the detailed design of the model to ensure it or a suitable alternative can be practically implemented consistent with the NEO. Ideally more work on proving the workability of an optional firm access model should be undertaken by the AEMC prior to making its recommendations to the SCER

# Network Planning and Pricing

Grid Australia endorses the AEMC's recommendations with respect to national planning. The proposed planning approach ensures that the strengths of both TNSPs and the National Transmission Planner (NTP) are used to best effect to deliver an efficiently planned national transmission network.











Grid Australia considers that the AEMC's objective for national transmission pricing can be better implemented by having TNSPs maintain responsibility for publishing prices and billing customers in their region. The process would involve TNSPs providing information to the party responsible for national pricing and that party providing information back to TNSPs for the purposes of publishing prices and billing customers. This would deliver national pricing, but importantly ensure the relationship between the service provider and customer is maintained.

This relationship with customers is important in a number of instances, including: for the provision of indicative prices in response to connection enquiries, where price and service trade-offs are requested, and where prudent discounts might be appropriate in accordance with the Rules.

# Connections framework

Grid Australia is concerned that the changes proposed put at risk the ability for connecting parties to achieve outcomes that are most important to them, namely: efficient and timely negotiations with necessary flexibility, timely project delivery and price certainty. In particular:

- Requiring TNSPs to provide extensions as effectively a regulated service is unnecessary and exposes TNSPs to unlimited liability that is out of step with the approach in other like sectors. Grid Australia therefore urges the AEMC to reconsider its approach to extensions and the potential impacts its proposal might have on the financial wellbeing of TNSPs.
- The AEMC's proposed open book approach to negotiated transmission services will create strong pressure for negotiations to be centred on the "cost justification" of such services. In turn, Grid Australia considers that this will encourage risk to be shifted from TNSPs to generators and directly connected loads, effectively removing the ability and incentive for TNSPs to provide a commercially flexible, "high valued" service to connecting parties.

These summary comments are expanded upon in the attached submission.

Grid Australia looks forward to continuing to work with the AEMC and stakeholders through the further stages of the review. If you require any further information, please do not hesitate to contact me on (08) 8404 7983.

Yours sincerely

Rainer Konte

Rainer Korte Chairman Grid Australia Regulatory Managers Group



# Transmission Frameworks Review

Submission in response to AEMC Second Interim Report

October 2012













# **Table of Contents**

1	Introduction and summary1			
	1.1	Summary of key points1		
2	Generator access			
	2.1	A detailed implementation plan is needed4		
	2.2	Issues to be resolved5		
3	Transmission planning and pricing			
	3.1	Transmission planning6		
	3.2	Transmission pricing8		
4	Coni	Connection arrangements		
	4.1	Services outside the boundary of the existing network10		
	4.2	Services within the boundary of the existing network15		
	4.3	Future access17		
	4.4	Clarifying the Rules		



# 1 Introduction and summary

Grid Australia welcomes the opportunity to provide a submission to the Australian Energy Market Commission's (the AEMC) Second Interim Report for the Transmission Frameworks Review (TFR). As the AEMC is aware, Grid Australia represents the owners of all major electricity transmission networks in the National Electricity Market (NEM). As a result, its members have a direct and substantial interest in the matters addressed in the TFR.

# 1.1 Summary of key points

Grid Australia offers the following views on each of the key aspects of the Second Interim Report.

# Generator Access

Grid Australia recognises the potential benefits of strengthening the certainty of network access provided to generators and setting a price for this service. Therefore, Grid Australia supports the further development of the optional firm access model proposed by the AEMC.

However, to date the model has been developed at a conceptual level only, and Grid Australia is aware that a number of suggestions for refining that model have already been proposed. Therefore, the AEMC is encouraged to focus its recommendations to the Standing Council on Energy and Resources (SCER) on the work plan that would be required to further investigate the detailed design of the model to ensure it or a suitable alternative can be practically implemented consistent with the NEO. Ideally more work on proving the workability of an optional firm access model should be undertaken by the AEMC prior to making its recommendations to the SCER.

Grid Australia proposes that working groups with direct participation of industry and consumer stakeholders be convened to review and advance the detail of a scheme and to oversight its testing. Such an approach is intended to directly harness the experience of relevant market participants and apply a similar consensus approach to reform that characterised the development of the current NEM arrangements. The body of this submission also provides Grid Australia's initial thoughts on some of the detailed matters that will require further investigation during this process.

Grid Australia also reaffirms its support for the proposed clarifications necessary to implement the non-firm access model, in particular, the clarifications to clause 5.4A of the Rules.



# Network Planning and Pricing

Grid Australia endorses the AEMC's recommendations with respect to national transmission network planning. The proposed planning approach ensures that the strengths of both TNSPs and the National Transmission Planner (NTP) are used to best effect to deliver an efficiently planned national transmission network. It is important, however, that ultimate responsibility for service delivery remains with TNSPs and that flexibility remains to depart from the views of the NTP where appropriate, noting that transparent justification would be required when doing so. Such an approach would reflect the fact that TNSPs are closer to and better placed to address regional issues.

Grid Australia considers it important for the AEMC to emphasise in its recommendations that its proposal for transmission planning will promote the NEO under either of the proposed generator access models. As such, a decision on which approach to take for generator access should not delay the implementation of the recommendations on network planning. The AEMC is also encouraged to consider how its planning proposals can be implemented to avoid unnecessary delays or duplication in the planning process.

Grid Australia considers that the AEMC's objective for national transmission pricing can be better implemented by having TNSPs maintain responsibility for publishing prices and billing customers in their region. The process would involve TNSPs providing information to the party responsible for national pricing and that party providing information back to TNSPs for the purposes of publishing prices and billing customers. This would deliver national pricing, but importantly ensure the relationship between the service provider and customer is maintained.

This relationship with customers is important in a number of instances, including: for the provision of indicative prices in response to connection enquiries, where price and service trade-offs are requested, and where prudent discounts might be appropriate in accordance with the Rules.

# Connections framework

Grid Australia is concerned that the same level of analysis that has been undertaken for the generator access and planning issues has not been applied to the analysis of the connections framework.

In particular, Grid Australia does not consider that the case for substantial change to the connections framework has been made, and the proposed "solutions" would be detrimental to the achievement of the NEO. The changes proposed put at risk the ability for connecting parties to achieve outcomes that are most important to them, namely: efficient and timely negotiations with necessary flexibility, timely project delivery and price certainty. In particular:



- Requiring TNSPs to provide extensions as effectively a regulated service is unnecessary and exposes TNSPs to unlimited liability that is out of step with the approach in other like sectors. Grid Australia therefore urges the AEMC to reconsider its approach to extensions and the potential impacts its proposal might have on the financial wellbeing of TNSPs.
- The AEMC's proposed open book approach to negotiated transmission services will create strong pressure for negotiations to be centred on the "cost justification" of such services. In turn, Grid Australia considers that this will encourage risk to be shifted from TNSPs to generators and directly connected loads, effectively removing the ability and incentive for TNSPs to provide a commercially flexible, "high valued" service to connecting parties.

# 2 Generator access

Grid Australia welcomes the analysis and level of debate the AEMC has undertaken in the course of considering the generator access issue. Grid Australia agrees with the AEMC that there are a number of desirable features associated with providing generators with an increased level of network service. Therefore, it supports the further development of models for achieving this aim, including the proposed optional firm access model. The benefits of firmer network access for generators might include:

- Greater certainty for generators with this flowing ultimately into lower wholesale prices, where the level of firmness provided to any generator reflects the value that it places on that firmness
- Reduced incidence of 'disorderly' bidding
- Locational signals for new generator investments would be strengthened (with the prospect of reducing the delivered cost to final consumers), and more reliance on market signals to drive future investment on the transmission network
- An enhanced approach to interconnector investment, and
- A more certain standard for TNSP service provision for generators, thereby encouraging the potential development of more comprehensive arrangements for financial incentives for service performance.

Given the prospect of these benefits, but noting the limited time that stakeholders have had to focus on the preliminary details of the model, the comments in this submission are directed principally on the appropriate transition between a conceptual model to one that is capable of ultimate acceptance and practical implementation consistently across the NEM.



In addition, and for the avoidance of doubt, should the AEMC also put forward a recommended framework for the non-firm access model, Grid Australia supports the proposed clarifications to the Rules necessary to implement this model. In particular, Grid Australia supports resolving the application of the clause 5.4A provisions.

# 2.1 A detailed implementation plan is needed

It is clear that the introduction of the optional firm access model, or any like model for achieving the AEMC's objectives, would be a fundamental change to the operation of the NEM. Indeed, it is likely to represent the largest reform to the NEM since its commencement. This implies that there will be many high-level and then progressively more detailed implementation issues that need to be resolved, and substantial costs incurred across market participants to effect the changes.

Given the size of the potential reform involved, Grid Australia considers that the AEMC's recommendation to the Standing Council on Energy and Resources (SCER) should be in the form of recommended next steps, and a proposed process and governance arrangements for taking those steps, rather than to ask SCER to sign off on a particular model design. This approach would ensure that the appropriate activities, tasks and analysis are undertaken for the market to have confidence that the model that is ultimately chosen has a good chance of being workable and successful.

In the context of identifying next steps, Grid Australia considers that the AEMC should consider making the following recommendations to SCER:

- That a dedicated working group of industry experts, consumer representatives and government officials be established to further develop the firmer access model. The objectives of such an approach are to harness the necessary expertise and experience of relevant stakeholders and to apply a similar consensus approach that characterised the original NEM reforms
- A workplan, or terms of reference, should be set out by the AEMC for the working group that identifies the issues the working group needs to address along with indicative timing. The AEMC may also wish to identify a possible funding model for the working group
- That, under the guidance of the working group, a number of studies be undertaken, with the working group to identify who should undertake these studies. The AEMC should specify which particular studies it considers are necessary, with a study on the allocation of access rights to existing generators expected to be a high priority (with the intention of identifying many of the practical issues with implementing generator access)
- That paper trials be undertaken to test the robustness of key assumptions and approaches, and



• A possible framework for implementation that includes a transition of exposure for relevant market participants (mainly generators and TNSPs) to the full financial effects of the model.

# 2.2 Issues to be resolved

While there has only been limited time to consider the preliminary details of the conceptual model proposed by the AEMC, this section identifies some issues that Grid Australia considers will require further investigation and thought. It is noted that some of these issues are specific to the model the AEMC has proposed, whereas others are common to any approach for implementing firmer generator access. Aspects requiring further consideration for development of the model include:

- Currently the model appears to be based on the relatively predictable transfer capability referenced to thermal limits; however, stability driven constraints also impact on transfer capability and hence network access. The nature of stability constraints is that they are affected materially by the characteristics of the generators that are in operation, which accordingly complicates the assignment of cause for the erosion of network capacity. Prediction of the future incidence and materiality of stability constraints is exceedingly difficult given the uncertainty of the future generation mix. It is Grid Australia's view that considering how stability-based constraints can be accommodated in the proposed model should be a priority.
- It is unclear at this stage what the likely costs of maintaining a firm access standard into the future might be, which in turn raises the question of whether measures should be included to ensure the costs imposed onto customers of maintaining the standard are not prohibitive. For instance, the AEMC may wish to consider whether the firm access standard could be changed in the future based on cost-benefit considerations.
- It is unclear how the Firm Access Standard is to be determined for flowgates which have dynamically varying capacity. From Grid Australia's perspective, framing the standard around system normal conditions, with incentives for TNSPs to minimise outages, is likely to be preferable.
- Finalising the approach to pricing firm access is likely to be a challenging issue and hence should also be treated as a priority. While Grid Australia appreciates there are a number of conceptual benefits with the AEMC's proposed approach, it is important to ensure it does not lead to unintended distortions from efficiency, or leave generators or customers bearing more of the cost of network investment than is appropriate.
- Grid Australia supports broadening the accountability of transmission businesses for transmission service delivery and the desirability of extending the coverage of financial incentives for service. However, simpler approaches to

those proposed by the AEMC may achieve this objective without the apparent complexity of the incentive arrangements for transmission that are a component of the Commission's proposed model.

 Given the optional firm access model will see services provided to generators (access) and customers (reliability), it is necessary to consider further how the dual service/planning obligations on TNSPs may interact. One consideration will be to what extent it makes sense to assume different levels of redundancy when setting generator access prices to what ultimately must be maintained to meet customer planning standards.

# 3 Transmission planning and pricing

This section first addresses the AEMC's findings on the transmission planning framework. This is followed by comments on the proposed approach to transmission pricing.

# 3.1 Transmission planning

Grid Australia agrees with the AEMC that the current planning arrangements appear, on the whole, to be working well and delivering the desired outcomes. It is also the case that there is scope for enhancements to the framework to further promote its effectiveness. In particular, the framework can be enhanced by achieving national consistency in transmission planning, in parallel with ensuring appropriate accountability on relevant parties. As such, Grid Australia endorses the AEMC's recommendations for improvements to be made to the planning framework.

Grid Australia also agrees with the AEMC that a consistent national approach to network planning is needed. This point is reflected in statements in the Second Interim Report:<sup>1</sup>

The Commission notes however, that these additional NTP functions [to AEMO] represent an oversight and coordination role which requires a body distinct from the first tier transmission investment decision maker. AEMO's exercise of this enhanced national transmission planning role would be inconsistent with its current Victorian jurisdictional investment decision making responsibilities.

The Commission's preferred solution would be for the Victorian jurisdictional investment decision making functions to move from AEMO to the TNSP, as specified by COAG and thereby creating a consistent approach across the NEM. This step would also have the effect of increasing the level of AER oversight of capital expenditure in Victoria.

<sup>&</sup>lt;sup>1</sup> AEMC, *Transmission Frameworks Review, Second Interim Report,* 15 August 2012, Sydney, p.vi.



It is important to emphasise that implementation of the recommendations on transmission planning are not, and should not be, dependent upon whether the optional firm access model proceeds. Appropriately, the AEMC has acknowledged that its recommendations on transmission planning will be effective irrespective of the approach that is ultimately chosen for generator access. As such, a decision on the generator access approach should not unnecessarily delay the implementation of the recommendations on network planning.

On the specific proposals for transmission planning, Grid Australia offers the following views:

- The enhanced role proposed for AEMO will further ensure its strategic national perspective is incorporated into network planning. It will also provide market participants with additional confidence that TNSPs will continue to undertake efficient projects on the basis of robust assumptions. Notably, the national implementation of this model will assist in enabling increased accountability as well as improve the ability for comparisons to be made on the performance of TNSPs between jurisdictions, noting the nature of the transmission service and associated investments mean there are some limitations to the extent this is achievable.
- It is important that the AEMC ensure that the NTP's role remains as an advisor rather than it being directive on which network investments TNSPs undertake. This is to reflect the fact that ultimately it is the TNSPs that bear the responsibility and accountability for their network's performance and need to finance any new investments. This is also consistent with the Council of Australian Governments (COAG) policy, as stated in the Terms of Reference for this review, that TNSPs maintain responsibility for network investment.
- When considering the implementation of the proposed enhancements, the AEMC is encouraged to avoid potential delays to planning processes and unnecessary duplication of effort. For instance, where the NTP is intended to perform an oversight role, the AEMC should consider where this role could be performed effectively through the NTP assessing the processes and/ or decisions of TNSPs rather than undertaking analysis afresh itself.
- Formalising the cross-border consultation between TNSPs will provide transparency to market participants that TNSPs are considering all options across the NEM before making an investment. Further, the proposed approach to the economic regulation of cross-border investments will ensure, to the extent it is a concern, that there is no disincentive for these projects to progress.
- Formalising the TNSP involvement in the National Transmission Network Development Plan (NTNDP) process ensures that the voice of the current working group of TNSPs is given appropriate weight by the NTP. This will be strengthened further if the implementation of this measure ensures that this



involvement is as transparent as possible. In this way market participants are assured that the NTP will give proper regard to all relevant information before it.

• Grid Australia supports the AEMC's finding that there is no evidence to suggest the Regulatory Investment Test for Transmission (RIT-T) needs to be revisited. Regarding the transparency of wealth transfers, while Grid Australia has no inprinciple concern with additional transparency where this is possible. However, identifying these transfers does not provide any information about efficiency gains or losses and hence whether the NEO is achieved.

# 3.2 Transmission pricing

Grid Australia supports a single body having the responsibility for determining network prices that should apply across the NEM.<sup>2</sup> However, the proposed approach removes an important relationship between the service provider and the customer that should be maintained. Grid Australia considers that a model that achieves the AEMC's objective of a single national approach can be maintained, while also ensuring TNSPs continue to have a pricing relationship with their customers.

To implement the national pricing approach proposed by the AEMC it is necessary to have a single party gather data from all regional TNSPs and run a single national pricing model. The party responsible for running the model might be AEMO, as proposed by the AEMC, or any of the individual regional TNSPs on behalf of the others.<sup>3</sup> Grid Australia proposes, however, that once the national pricing model is run that the pricing information would then be provided back to regional TNSPs. The regional TNSPs would then publish prices and bill customers based on this information.

Grid Australia considers that the key benefit of its proposed approach is that it delivers national pricing while maintaining an important relationship between customers and the party responsible for service delivery - TNSPs. This relationship with customers is important in a number of instances, including: for the provision of indicative prices in response to connection enquiries, where price and service trade-offs are requested, and where prudent discounts might be appropriate in accordance with the Rules.

At present pricing is undertaken as a part-time role by TNSP staff. The implication of this is that the potential for administrative cost reductions from a national pricing framework should not be overstated. Indeed, given TNSPs would still be required to provide all the data to the party responsible for determining prices nationally, it is not clear that there would be any administrative cost reductions from having another party run the pricing model.

<sup>&</sup>lt;sup>3</sup> Grid Australia notes that the concept of a coordinating TNSP already exists in the Rules whereby a single TNSP set prices on behalf of other TNSPs in a region. Under a national pricing approach the coordinating TNSP, however, would not be required to bill customers or receive revenue on behalf of other TNSPs.



Movement to a national pricing approach will also require detailed consideration of a number of transitional and implementation issues. In the first instance a single national pricing methodology will need to be developed. A national pricing approach will also see prices for some customers increase while for other customers prices may fall. The AEMC may wish to consider whether transitional arrangements are required to smooth the potential impact of these changes on customers.

# 4 Connection arrangements

While it is apparent that considerable effort has been undertaken to develop a conceptual optional firm access model, it does not appear that the same level of analysis has been undertaken with respect to the connections work stream. Indeed, it appears that many of the conclusions reached in this area have been based on assertions or assumptions rather than evidence.

Grid Australia reiterates that the volume of new generation and major load connections that have been undertaken since the introduction of the current connections framework demonstrate that there are no barriers arising from the connections framework to generation and load entry in the NEM. In terms of assessing economic efficiency, this outcome is paramount. This is because it demonstrates that the framework does not lead to economic losses for society.

Grid Australia does not consider that the case for substantial change to the framework has been made by the AEMC. Indeed, the changes proposed by the AEMC are likely to have a number of significant and deleterious consequences.

In responding to this matter Grid Australia has taken into consideration what it understands from experience are the key objectives for connecting parties from the connections framework:

- Efficient and timely negotiation, which includes flexibility as well as an efficient process,
- Delivery of commissioned connections assets on time, and
- Price certainty for the connecting party, meaning that the price is known prior to the connecting party's investment occurring and with fixed price arrangements.

These outcomes are already delivered by the current framework. As explained below, however, making the substantial changes proposed by the AEMC will effectively remove the ability and incentive for TNSPs to provide a commercially flexible and timely approach for generator or load connections and lead to risks being shifted from TNSPs to connecting parties. These outcomes would put at risk the achievement of each of the key objectives sought by connecting parties.

The current review process has made it clear, however, that there is a lack of clarity regarding the operation of the current framework. It is for this reason that



Grid Australia submitted a supplementary submission that identified how the Rules could be amended to improve their clarity. Further to this, it is agreed that further transparency around the connection process would be beneficial.

The remainder of this section addresses the AEMC's proposal in four areas:

- Services outside the boundary of the existing network,
- Services within the boundary of the existing network,
- Future access issues, and
- Clarifying the Rules.

# 4.1 Services outside the boundary of the existing network

The Rules presently state that nothing in the Rules is to be read or construed as imposing an obligation on TNSPs to effect an extension of the network.<sup>4</sup> As such, the AEMC's proposal for services outside the boundary of the existing network would be a fundamental change to the role and obligations of TNSPs. The AEMC's proposal would require TNSPs to face an unlimited liability to finance assets – this is a liability that TNSPs do not presently face. The proposed solution also ignores that these services are fundamentally subject to contestability and imposing regulation in this circumstance is heavy-handed, costly, and unnecessary. Grid Australia considers that the AEMC's proposals in this area appear to have been based upon limited analysis and do not support the conclusions that have been reached.

# 4.1.1 Proposed unlimited liability for extensions

The AEMC has effectively proposed that TNSPs be required to finance an asset, which is presently defined as an extension, when the connecting party does not want to finance it. At present TNSPs are only obliged to finance investment for the shared network or discrete assets within the boundary of the network to accommodate a network connection. The AEMC proposal, however, imposes an unlimited liability on TNSPs, and correspondingly, substantial risk. The level of liability this would impose is disproportionate and creates risks that are not borne in other sectors, including for instance, for gas pipelines.

The risks associated with an obligation to finance extensions are significantly different to the risks of a TNSP's current obligations:

• The potential size of the obligation is unknown. An extension could be many hundreds of kilometres long and come at a sizeable cost (for example, the cost of a 200km extension can be upwards of \$275 million, depending on the

<sup>&</sup>lt;sup>4</sup> See clause 5.3.6(k) of the Rules.



specific requirements). The capacity and length of an extension, however, is predominately at the discretion of the connecting party and is not a decision for the TNSP.

• The potential exists for the certainty of cost recovery to be materially different between extensions and the shared network. For the shared network, cost recovery is reasonably certain given costs are recovered from a very broad customer base in a prescribed manner. The costs associated with an extension, however, need to be recovered from a single or small number of counter-parties, which can include entities across the spectrum of credit worthiness.<sup>5</sup> Commercial measures exist for limiting a TNSP's exposure to the default of a counter-party, for example, by requiring a bank guarantee, a prepayment of charges or a combination thereof. However, under the model the CAEMC proposes, the terms and conditions of such agreements, including the prudential arrangements, may ultimately be determined by a commercial arbitrator, with the consequence that the TNSP may bear substantial default risk.

Requiring TNSPs to take on the obligation for providing extensions, and their associated risks, will have a significant impact on the transmission business:

- Not least, the additional risks of the potentially significant liability associated with a very narrow customer base will have a direct impact on the credit rating of a TNSP. This, in turn, will impact on the cost of raising funds for TNSPs, including for investments on the shared network. This is because rating agencies see revenues from bilaterally-provided services as higher risk.
- The capacity for a business to raise debt is not unlimited. The potential size of the liability will have serious impacts for those businesses that have real constraints on the ability to raise debt. This, in turn, might have an impact on the financial performance of the TNSP and the cost of raising debt.

Grid Australia is very concerned about the AEMC proposal in this area. If the AEMC decides it does not share Grid Australia's concerns, then it is essential that the AEMC at least take measures to limit the size of the obligation and consequential risks TNSPs would face with respect to extensions. Grid Australia encourages dialogue between the AEMC and TNSPs on any potential options in this respect.

<sup>&</sup>lt;sup>5</sup> Even though parties connecting directly to the transmission network may be large, substantial credit risk may exist. For example, the credit worthiness of a stand-alone mining operation is dependent on the ore price, which can fluctuate substantially and also affect a number of a TNSP's customers simultaneously. The same portfolio effects can also exist with respect to particular generation technologies. In addition, the capacity for a TNSP to take legal action to recover from a connected party is affected by the country in which the relevant entity is domiciled.



# 4.1.2 Regulation for extensions is unnecessary

The AEMC has essentially found that extensions, while contestable, are not provided within a workably competitive market. TNSPs are perceived to have a competitive advantage in providing "end-to-end services" and therefore have a substantial cost advantage. Grid Australia does not consider that the AEMC has provided evidence to support this assertion.

There are two significant problems with the AEMC's analysis on the market for extensions:

- To the extent that any actual barriers to entry exist, it has not sought to address the real cause of these.
- It has heavily discounted the actual examples of 'self-supply' as a discipline on TNSP's pricing of extension services with limited reasoning for this position.

# Barriers to entry

The report provides a table of areas where the AEMC contends that TNSPs have a competitive advantage over other providers. While a response to these is provided in the table below, Grid Australia wishes to focus on two of the perceived most prominent barriers: obtaining easements, and state-based licenses.

It is Grid Australia's view that if barriers are found to exist, then the AEMC should seek to have them addressed at the source. Indeed, it is concerning that the AEMC's first response when it perceives barriers to entry for extensions is to regulate further rather than to seek to address those barriers and thereby expand the scope of competition. This is inconsistent with the AEMC's approach to other matters where it has sought to rely on markets and commercial outcomes to drive efficiency. Importantly, the AEMC's review is to provide recommendations to SCER and it is therefore highly appropriate for the AEMC to identify required changes to state legislation where this would enhance the NEO and is preferable to rule changes. It is not necessary – and certainly not optimal – to create unnecessary regulation through the Rules to address these issues.

At present TNSPS, through state-based legislation, can compulsorily acquire land for easements. Connecting parties are clearly experienced in negotiating land access given they require it for their own commercial activities. Nevertheless, connecting parties do not have the same authority as TNSPs to compel land-owners to provide their land for easements in all jurisdictions. To the extent this is a barrier it can be resolved by a change to State legislation. The change could provide connecting parties with the same powers as network businesses to compulsorily acquire land for the purpose of building an easement. This would put beyond doubt whether or not this issue was a barrier to self-supply of easements.



The AEMC states that in New South Wales "no party other than TransGrid can gain transmission licenses and so build extensions".<sup>6</sup> TransGrid is investigating the actual circumstances in this jurisdiction and will consult with the AEMC separately on this matter. Nevertheless, to the extent there is a concern, Grid Australia again encourages the AEMC to recommend that it be addressed at its source rather than through the introduction of new regulation in the Rules. In other NEM jurisdictions, this barrier to entry does not exist.

# No material cost advantage for TNSPs

The AEMC claims that TNSPs can provide extensions at lower cost than generators or major load customers. However, the table below, based on Figure 6.1 in the 2<sup>nd</sup> Interim Report, indentifies that this is unlikely to be the case. Indeed, the AEMC has not provided any evidence to support its assertions about cost differences between TNSPs and connecting parties. Importantly, if it is true that TNSPs have a significant cost advantage, the AEMC is also implying that all previous cases of self-supply of extensions have been inefficient. It is not clear to Grid Australia why the AEMC would assume any commercial operation would choose to behave in such a way.

Element	AEMC Position	Grid Australia Response
Project Management	TNSPs have an advantage through economies of scope and experience	Generators / major consumers, or their contractors, also have significant relevant experience, and would be doing so already in relation to their connecting investment.
Obtaining planning permission/ approvals State-based licensing	TNSPs have an advantage through economies of scope and experience. Generators cannot get a network licence in NSW.	Generators / major consumers also have significant relevant experience, and would also be facing such processes in relation to their connecting investment. Any regulatory barriers should be addressed directly rather than imposing regulation.
Obtaining easements	TNSPs have an advantage through legislation and existing easements. Third parties cannot obtain in NSW, and ministerial approval required in other states	Generators / major consumers already negotiate with land holders over access for their own sites. Any regulatory barriers should be addressed directly rather than by imposing regulation.
Detailed design	TNSPs can carry this out, whereas generators require contractors. That said, no advantage for TNSPs.	Agree with AEMC.

# Table 1: Current provision of elements of an extension – AEMC position and Grid Australia response

<sup>&</sup>lt;sup>6</sup> AEMC, *Transmission Frameworks Review, Second Interim Report,* 15 August 2012, Sydney, p.143



Element	AEMC Position	Grid Australia Response
Procurement	May experience economies of scope and experience – through purchasing non-extension assets	Economies in procurement are unlikely to be material and this assumes bulk purchasing. It also assumes a lack of competition in the asset supply market. Also, if a project is sufficiently large then the proponent/contractor will have the same access to bulk purchasing as the TNSP.
Construction	No advantage – all done by contractors	Agree with AEMC.
Operation e.g. in accordance with jurisdictional requirements	TNSPs have an advantage through economies of scope and experience. DNSPs or contractors cannot undertake this	Generators / major customers have extensive experience complying with similar specific jurisdictional/legislative requirements (such as safety reporting requirements). No advantage to TNSPs. Any perceived regulatory barriers should be addressed directly.
Maintenance i.e. routine servicing of the plant or equipment ensuring it is kept in accordance with standards	Generators or contractors cannot undertake. TNSPs and DNSPs both have an advantage through economies of scope and experience.	Contractors can and do undertake maintenance and it is common for TNSPs to outsource this service to third party providers.
Ownership	No advantage	Agree with AEMC

Given the responses identified in the table above, Grid Australia strongly urges the AEMC to reconsider whether TNSPs have a material cost advantage over self-supply. It is Grid Australia's contention that no such cost advantage exists and that self-supply is a meaningful alternative to TNSP provision of services outside the boundary of the present network.

# Self-supply is a sufficient constraint on TNSP behaviour

The AEMC acknowledges that there have been numerous examples of self-supply for extensions in the NEM. However, it heavily discounts these as evidence of a constraint on TNSPs' pricing and service behaviour. The AEMC provides very limited discussion of why these examples have been discounted. However, it appears that the AEMC perceives that parties other than the TNSP or the connecting party are necessary for there to be evidence of a workably competitive market.

Grid Australia disagrees with any suggestion that the possibility of third party ownership is necessary before the provision of extensions can be found to be competitive. The connecting party is the natural alternative proponent to own / finance



an extension asset.<sup>7</sup> As the AEMC has found in the table above, TNSPs have no advantage over the connecting party with respect to the ownership of extension assets (and to conclude otherwise would be a material error).

Given there is no material cost advantage to TNSPs for providing extension services, self-supply is sufficient to constrain the pricing and service behaviour of TNSPs. The corollary is that it is not a necessary condition for there to be additional 3<sup>rd</sup> parties willing to finance extensions on behalf of the connecting party.

The fact that self supply is sufficient to constrain the pricing and service behaviour of TNSPs means that the threshold for imposing the high costs and risks of regulation has not been met. As previously stated, to the extent the AEMC perceives there are any remaining barriers these should be addressed at their source rather than through an unnecessary imposition of regulation.

# 4.2 Services within the boundary of the existing network

The AEMC recommends that services within the boundary of the existing network remain the sole responsibility of TNSPs. It has also recommended that the negotiations for these services effectively be subject to an "open book" process. That is, connecting parties would have access to the outcomes of any construction tender that has been undertaken and would be able to express their preferences for which tender is selected.

Grid Australia supports the AEMC's recommendation that TNSPs continue to have the sole responsibility for the provision of connection services within the boundary of the network. Notably, unlike for extensions, it is not feasible to separate the provision and ownership of these assets because of the potential impact of such assets on the operation of the shared network, for which the regional TNSP appropriately bears the ongoing liability.

Moreover, allowing others to construct such assets and then transfer to the TNSP – while retaining the liability on TNSPs for service performance – would expose consumers and TNSPs to unnecessary and inappropriate risks. The risk to consumers and TNSPs in this instance comes from the fact that the contestable provider would not have an incentive to take account of ongoing service performance requirements when deciding what to construct, nor to take this into account during construction. Given the absence of accountability for ongoing service performance,

<sup>&</sup>lt;sup>7</sup> As pointed out previously, the potential for competition in extensions is materially different to the potential for competition in the provision of shared network assets (for example, as has been attempted in Victoria). For extensions, the connecting party is the obvious alternative owner to the TNSP. However, for shared network assets, the only possible alternative owners will be third parties. The absence of willing third party "owners" for shared network assets is one of the reasons that competition in shared network provision has not emerged in Victoria.



the incentive for the party constructing the assets will be to minimise upfront costs at the expense of ongoing costs or service delivery risk.

# 4.2.1 Implications of an 'open book' framework

Grid Australia supports increased transparency in connection negotiations. The AEMC's proposal, however, would result in a complete open book process. While an open book framework would be relatively straightforward to implement, Grid Australia does not consider it is necessary. Further to this, there are a number of important implications of this approach that the AEMC should be aware of before confirming its position on this matter.

The key implication of an open book approach is that negotiations become a discussion about *cost* and the transfer of risk from TNSPs to connecting parties. The transfer of risk, in turn, would stem from the pressure for the prescribed services regime to be applied to connection assets – central to which is that risks to TNSPs are low, as reflected in the relatively lower regulatory WACC. The consequence being that it would be comparatively more difficult to price the risks.

Thus, an immediate outcome is that connecting parties would take on most of the pricing risk for a project. At present TNSPs set a price for a connection that is fixed prior to investment, implying that TNSPs take on pricing risk as well as delivery risk for a project. A TNSP is willing to take on this risk where it is able to earn a commercial return commensurate with the risk. However, under pressure for the prescribed services WACC to be applied, TNSPs would seek to ensure that their risk positions were consistent with that WACC.

Similarly, TNSPs would be much less willing to agree to a definitive delivery date that is backed up with the potential for material liquidated damages. This risk is not compensated for in the prescribed services WACC and is something whose cost would be difficult to quantify in a cost-focussed inquiry, with a transfer of risk to the connecting party being the more straightforward and likely outcome.

Importantly, under the AEMC's proposed approach, connecting parties would not have certainty over prices until much later in the connections process. Currently, TNSPs provide connecting parties with a price prior to the closure of the connecting party investment decision and the transmission investment taking place. The TNSP then seeks to contain costs in order to meet that price. Under an open book process, the connecting party will no longer get a fixed price at the start of the process. Instead, a firm price will not be established until agreement has been reached with the construction provider. This happens much later in the process.

# 4.2.2 Transitional arrangements

Grid Australia notes that at the time any new rule related to the transparency of negotiations is implemented, there will inevitably be a number of connection negotiations in train. As TNSPs take on pricing and delivery risk under the current



approach, it would be inappropriate to impose an open book process to these negotiations. Therefore, Grid Australia considers it is important that there be transitional arrangements that require that the open book transparency obligations only relate to negotiations that commence after any rule is made. Grid Australia considers that any revised arrangements should not apply retrospectively to existing connection agreements.

# 4.3 Future access

The AEMC has sought to develop a new framework to mitigate the risk of future access disputes for extensions. Grid Australia considers that this framework is unnecessary and is likely to lead to distorted incentives for connecting parties that might wish to provide their own extensions.

In the first instance, where an extension is owned by a TNSP, the Rules already include a mechanism to enable non-regulated assets that are used to provide prescribed transmission services to be brought into the Regulatory Asset Base (RAB). Any payments negotiated with a third party owner for providing the service would simply be treated as normal capital or operating expenditure.

For those assets that are not owned by the TNSP, regulating at the outset simply based on the prospect of future access concerns is costly and unnecessary. The AEMC's proposed solution imposes regulation on assets and services that should not be subject to regulation. These are contestable services. Further to this, up-front regulation might be expected to distort the incentives of generators or major load customers that provide their own extensions where they are concerned about future asymmetric truncation.<sup>8</sup> In this situation a generator might have an incentive to either not invest, or to undersize the assets so as to preclude future access. The prospect of asymmetric truncation may also serve to create a barrier to connecting parties choosing to supply their own extensions.

# 4.4 Clarifying the Rules

As indicated above, Grid Australia supports a process to clarify the operation of the Rules with respect to network connections. In addition, the AEMC has sought to be consistent with Grid Australia's proposed principles for clarifying the framework as indentified in Grid Australia's supplementary submission on the First Interim Report. The AEMC's approach, however, is dependent on it proceeding with its proposal regarding the regulation of assets outside the boundary of the network. Should this proposal proceed, Grid Australia considers that the proposed approach may cause complications when applied in practice. The key issues arise due to the AEMC's proposal for the location of the "connection point".

<sup>&</sup>lt;sup>8</sup> Asymmetric truncation is the threat cost-based regulation poses a risk that high returns will not be permitted if a project is successful, but the losses will remain otherwise, thus undermining the economics of the project.



The AEMC has identified the transmission system connection point (TSCP) to be located next to the generator at the boundary of the transmission system. This has two important implications where a generator decides to provide its own extension:

- It means that performance standards, settlements and loss factors will differ depending on whether a customer owns 'extension assets' or whether extensions are part of connection assets and therefore negotiated services. This is because the TSCP under this circumstance will not be at the side of the generator but instead at a point within the substation; given this is where 'connection assets' will commence.
- If the connection point nevertheless remains at the generators side, it is not clear how the optional firm access model can be provided as a prescribed service, or indeed how TNSPs can have some accountability over providing access. This is because part of the assets required to provide access would be owned and operated by a party other than the TNSP.