

SUBMISSION TO PC DRAFT REPORT

VERSION: 1

DATE: 15 January 2013

FINAL

Contents

1	Introduction	3
2	Reliability, economic transmission planning	3
2.1	Using a Value of Customer Reliability.....	3
2.1.1	AEMO's National VCR Project	3
2.2	The Probabilistic Approach to Transmission Reliability	4
2.2.1	AEMO's economic planning assessment.....	5
2.2.2	A national economic framework for transmission reliability	5
2.3	The Productivity Commission's alternative proposal.....	6
3	Procure transmission services competitively	6
3.1	The benefits of competitively procured network services	6
3.2	Australia and international network services are being provided competitively	7
3.2.1	Competition in Australia	7
3.2.2	Competition in the United Kingdom.....	8
3.2.3	Competition in North America	8
3.3	Competitive framework for new connections	9
3.3.1	Reduction of connection costs	9
3.4	Competitive connections nationally	9
4	Interconnector investment	10
4.1	Efficient use of Interconnectors	11
5	Optional Firm Access and Transmission Planning	12
5.1	Implications of the AEMC's Optional Firm Access arrangements	12
5.2	AEMO's preferred financial access rights arrangements	12

1 Introduction

Australian consumers are currently paying too much for their electricity.

Successive reviews have, or are in the process of, recommending ways to empower end users, implementing a more economic cost-benefit approach to network planning, promoting inter-regional trade across the National Market, and adopting a national coordinated approach to transmission and generation development.

The PC has recommended many changes which are in line with this that will contribute to a more efficient electricity market and will deliver better outcomes for consumers.

AEMO welcomes many of the draft recommendations and findings in the Productivity Commission's Draft Report, with the one area for significant change being the contestability framework for new network services.

This submission highlights AEMO's views on the Productivity Commission's Draft Report.

2 Reliability, economic transmission planning

AEMO welcomes the Productivity Commission's draft recommendation for AEMO to carry out transmission planning for all transmission networks in the NEM¹.

The recommendations are based on many of the problems identified by AEMO in its submission to the Productivity Commission's Issues Paper namely:

- The information asymmetries between profit motivated regulated businesses and both regulators and customers
- The asset focused planning standards
- The state-by-state approach to planning

The NSW Government's recent review of the NSW Mid-North Coast acknowledges the problems with the current revenue setting and planning frameworks.² Further, recent changes to the planning framework proposed by ElectraNet to the South Australian Reliability Planning Standards to a probabilistic approach highlights the consensus that is emerging on the benefits of a cost-benefit approach to planning for consumers.³

2.1 Using a Value of Customer Reliability

AEMO also supports the Productivity Commission's comments on improvements to the probabilistic planning process to deliver more efficient and transparent outcomes. AEMO agrees that this must be conducted by a national independent body given the potential for gaming by a profit motivated business. As discussed in our first submission to the Productivity Commission, AEMO strongly supports a value of customer reliability, or something akin to it, to deliver efficient reliability planning outcomes and we will take the Productivity Commission's contribution to analysing VCR on board.

2.1.1 AEMO's National VCR Project

A number of VCR reviews have been conducted over the past decade. These include consultants CRA International's survey for VENCORP in 2002 and then in 2007, AEMO's 2010 work on re-weighting the 2007 VCR numbers as well as the AEMC's review this year on NSW Distribution Reliability Outcomes and Standards.

¹ Draft Recommendation 15.2

² Interim Report, NSW Mid-North Coast Review, January 2013

³ ElectraNet, Proposed Amendments to the Electricity Transmission Code, 26 November 2012

Given the large discrepancies between the results obtained through the AEMC's review and AEMO's 2007 survey and 2010 re-weighted values, a review of both the process to determine the VCR and the values is timely to accurately reflect the value customer's place on uninterrupted supply.

In addition, in April 2009 the SCER requested that the AEMC review the effectiveness of NEM security and reliability arrangements in light of extreme weather events following the impact of the 29-31 January 2009 heatwave events on Victorian and South Australian electricity supplies.⁴ The Extreme Weather Review was conducted between 2009 and 2010 by the AEMC driven in a large part by Ministers. In June 2012 the SCER (as the MCE⁵) published its response to the Extreme Weather Review⁶.

The Minister's 2012 recommendations included that AEMO establish national and regional measures of the Value of Customer Reliability to assist jurisdictional review of load shedding arrangements if appropriate. The recommendations also requested that the study be completed by the end of July 2013, noting that it may be contingent on the outcomes of current and previous reviews.

AEMO notes the Productivity Commission has identified some flaws in the current development of the VCR methodology relating to inadequate sampling, data, methodology and frequency of VCR updates. AEMO also acknowledges Draft Recommendation 14.1 which appears to provide a guide to AEMO on progressing with our calculations to account for the current shortfalls, including engaging the ABS to undertake surveys.

AEMO's National VCR project will be an enhancement to the approach undertaken previously in 2007 by taking into account the shortfalls identified by the Productivity Commission above.

To develop a set of National VCR numbers which is reflective of current economic conditions and consumer perceptions of reliability, AEMO will fully review the recommendations from the draft report on the approach to valuing customer reliability as well as the recommendations of previous VCR work.

AEMO has already conducted preliminary meetings with the ABS to understand the viability of proceeding with this approach.

AEMO will undertake the assessment in two stages involving a consultation process on the first element. The first stage will consider the requirements for the development of the values while the second stage of the review would be based on the outcomes of the first stage and further addressing the value of customer reliability to various types of customers as well as the detailed use and application of the values.

2.2 The Probabilistic Approach to Transmission Reliability

AEMO supports the Productivity Commission's Draft Recommendations 15.1 and 15.2 which propose the development of a NEM-wide reliability framework where reliability settings are informed by customer preferences as well as an approach to transmission planning seeks to drive reliability investment by an assessment of the costs and benefits.

AEMO believes an unfettered probabilistic approach which is transparent with its assumptions and has the correct checks and balances is the best way forward to balance reliability, cost, timing and type of investment. Improvements to the transparency of the current probabilistic assessment applied in Victoria will also ensure stakeholders are aware of the methodology and assumptions applied in determining the network investment that is most cost-effective to meet reliability standards.

⁴ SCER terms of reference, revised in August 2009: <http://www.scer.gov.au/workstreams/energy-market-reform/extreme-weather-events/>

⁵ The SCER used its historic title "Ministerial Council on Energy" (MCE) in the response.

⁶ The MCE response can be found at <http://www.scer.gov.au/workstreams/energy-market-reform/extreme-weather-events/>

AEMO also believes that transparency improvements to the application of the VCR in the probabilistic assessment would be valuable for customers and other stakeholders. This would include making public the amount of load acceptable or willing to be lost at any connection point before a reliability augmentation needs to be considered. This would complement AEMO's next phase of the National Electricity Forecasting Project which aims to produce connection point forecasts and therefore both of these pieces of information would inform the market the timing that a connection point potentially requires augmentation. This would then provide some locational signals for investment, including generation investment, and provide an improvement of transparency to all sectors of the market.

2.2.1 AEMO's economic planning assessment

As part of its 2012 NTNDP analysis, AEMO undertook an economic assessment on existing Transmission Network Service Provider (TNSP) projects for 2012-13 identified in the businesses Annual Planning Reports (APR) or a previous regulatory test application. This assessment was intended to provide information about the benefits of moving away from planning standards that require a fixed level of reliability.

AEMO compared the timing of augmentations proposed by the TNSPs⁷, applying existing planning criteria requiring a specific reliability outcome, with investments that are timed to deliver a better price-service balance for customers. The high-level study into the benefits of an economic cost-benefit approach to network investment showed that there are significant savings that could be achieved.

The study indicated that 2012–13 electricity bills may be at least \$40⁸ per customer, on average, too high because current electricity investment is based on reliability in isolation of cost and the type of investment and would defer most augmentation timings.

AEMO believes that an economic approach is expected to deliver even greater savings to electricity consumers in the long term by providing more time to develop new generation and transmission solutions and technologies; and accommodate changes to demand profiles, acknowledging a more energy-conscious community.

2.2.2 A national economic framework for transmission reliability

AEMO has been working with Grid Australia on a proposal for a new national transmission reliability planning standard which considers an economic approach. The new standard will draw from the Victorian probabilistic criteria and the South Australian hybrid criteria to deliver an enhanced approach to current methods for reliability planning.

Although this work is in its early stages, the following principles will be considered when developing the proposed standard:

- A national approach
- Increased consumer and stakeholder engagement
- Economic efficiency; a cost-benefit analysis that considers the value customers place on reliability
- Equal consideration of network and non-network solutions
- Improved transparency

These principles align with the Productivity Commission's draft recommendations on the approach to transmission reliability planning.

However, this planning approach cannot be considered in isolation of the revenue setting arrangements. The proposal to move to cost-benefit planning will deliver efficient investment outcomes in the longer term. However, unless this is coupled with appropriate revenue setting

⁷ AEMO worked closely with the TNSPs, to understand the nature of the constraint, the underlying dynamics and interactions between the networks and how the options proposed will address that constraint.

⁸ This is based on the current electricity infrastructure planned for 2012-13 of \$3 billion.

arrangements the benefits of a cost-benefit approach to planning will not flow through to customers.

2.3 The Productivity Commission's alternative proposal

AEMO acknowledges the Productivity Commission's Draft Recommendation 15.6 on a second best option to NEM transmission planning, should the SCER not accept its first preference.

Although a step forward from the current deterministic planning standards applied in some regions, AEMO believes the second best option which refers to AEMO setting hybrid standards, still has some shortcomings.

As noted in our first submission to the Productivity Commission, AEMO believes the hybrid standards drive network investment as the standards are expressed deterministically. In addition, although the Productivity Commission's draft recommendation has stated that the standards could be relaxed for connection points whose load forecasts have reduced (this is currently not allowed in its application in South Australia), the risk of having stranded assets on the network would still exist. This reduces the efficiency and utilisation of the existing network and over-investment of the networks continues. As noted earlier, this has also been acknowledged by the South Australian Transmission Asset owner ElectraNet.

3 Procure transmission services competitively

AEMO believes that the NEM would benefit from greater competition in the provision of network services where possible. The Productivity Commission have not supported, at this stage, framework for the competitive provision of network services citing limited evidence of its benefits. AEMO acknowledges the Productivity Commission's reservations.

Nevertheless, AEMO believes that there is scope to allow competition in the provision of network services, particularly for connection related services, extensions to the national grid and large augmentations such as inter-state investments.

This is described in detail below.

3.1 The benefits of competitively procured network services

Transmission services need to be procured efficiently given their high costs. Where possible, this should be achieved through competitive tendering of the construction and ownership of major network investments. Effective competition has the capacity to reduce market power and overcome information asymmetry problems. Competition is already proving to be effective in the construction and maintenance of network services across the NEM particularly for generation connections. Competitive markets are also effective in providing operation and ownership options for shared transmission services for new connections. Giving connecting generators choice provides construction and connection configured by generators which delivers the best outcome in terms of innovation for overall cost and risk management.

Greater competition, particularly for new generator connections, will have a flow-on effect for consumers by providing more efficient outcomes.

The market for new transmission infrastructure will continue to grow as new opportunities arise. There are 13 Network Service Providers in the NEM, all of which would be capable of competing with one another if the regulatory framework facilitated competition in all NEM jurisdictions.

Currently, the benefits of competition have been limited to the building and installation of assets outside the incumbent TNSP's immediate network. There are many reasons for this, including:

- transmission has natural monopoly characteristics, such that TNSPs can exercise market power to impede competition in any part of their network or in respect of network planning or operations roles;

- the TNSPs' natural monopolies are reinforced by legally explicit and implied territorial franchises over which they have sole rights of augmentation and connection; and
- allowing third parties to conduct work on transmission assets on property and assets owned by TNSPs (for example, work within substations or work on circuits and other assets owned by TNSPs) presents a risk to the TNSPs' assets and the secure continuity of transmission services.

3.2 Australia and international network services are being provided competitively

Benefits from the competitive provision of electricity transmission network services have been demonstrated both in Australia and internationally, with many countries exploring opportunities to introduce additional competition. Some examples below illustrate this point.

3.2.1 Competition in Australia

Competition already exists in the NEM for network services. All network businesses across the NEM use competitive processes to build and maintain their facilities. This suggests that some of the elements of the network delivery chain can be provided by the competitive market.

Victorian arrangements

The Victorian arrangements provide significant scope for the competitive provision of shared network services because:

- they permit the operation, as well as the construction, of stand-alone augmentations by competitive providers;
- they have a transparent process for enabling new players to obtain the authorisation they require to operate electricity transmission infrastructure
- they provide for competitive tendering, not just for network extensions but also for any stand-alone augmentations regardless of their location in the network (e.g. substations); and
- the tender process is transparent to connection applicants, with the benefits of competitive prices passed directly to the connection applicant and not retained by AEMO or the incumbent TNSP.

The potential for these arrangements to result in efficient pricing outcomes is evident by comparing the costs of two technically comparable terminal stations projects, where one was completed entirely by the incumbent TNSP, and a second completed by a new entrant transmission service provider.

A summary of the cost breakdown is provided in Table 1.

Table 1 –Breakdown of project costs

[Confidential — supplied under separate cover]

There are some complexities with the current Victorian arrangements which are partly a result of the additional options provided to generators and partly a result of AEMO's involvement. AEMO has proposed an alternative connection arrangement for augmentations and shared network connections that minimises its involvement and further reduces connection costs.

AEMO's proposed arrangements are described in more detail later in this section.

3.2.2 Competition in the United Kingdom

UK Government and Ofgem

The UK Government has set a target for 2020 to meet 15 per cent of the UK's energy needs from renewable sources. To meet this target about 30 per cent of the UK's electricity is required to be generated by renewables by 2020. Offshore generation is likely to be an important part of meeting this target. However, considerable uncertainty remains over the precise quantity and timing of offshore development, as this will be driven by commercial decisions that factor in future development costs, the level of subsidies available and any planning, technological or supply chain constraints.

The UK Government and Ofgem (Office of the Gas and Electricity Markets) recognised the potential benefits of a coordinated approach to developing offshore electricity transmission infrastructure projects. These include lower overall capital costs, reduced environmental impacts and fewer planning-related delays. For these reasons, the decision was made to extend National Grid's onshore System Operator responsibilities to include offshore assets. National Grid's responsibilities include developing a coordinated electricity transmission system and the creation of a licence obligation requiring the System Operator to develop an Offshore Development Information Statement (ODIS).

In early 2011 the Department of Energy and Climate Change (DECC) and Ofgem launched the Offshore Transmission Coordination Project. This project included stakeholder input and specialist reports on the benefits, costs and risks associated with different offshore grid configurations, and on the potential regulatory and commercial measures for incentivising coordination.

The findings suggest that coordinated offshore network development does indeed have the potential to deliver significant savings. Savings of between 8-15 per cent – or £0.5-3.5 billion⁹ – capturing some of the potential benefits and risks associated with coordinated grid configurations have been identified in comparisons with radial transmission configurations.

Modelling was undertaken by TNEI/PPA Energy and Redpoint Energy using four generation scenarios. The results found that coordination in respect of The Crown Estate (TCE) Round 3 Zones has the potential to deliver savings as well as increase as higher levels of generation are assumed.

3.2.3 Competition in North America

Federal Energy Regulatory Commission (FERC) Final Rule of Order 1000

The Federal Energy Regulatory Commission (FERC) in its Final Rule of Order 1000¹⁰ has found that incumbent transmission providers deprive customers of the benefits of competition in transmission development, and associated potential savings, as a result of the federal right of first refusal. This right is defined as a rule, regulation, practice, or contract affecting the rates for jurisdictional transmission service.

In response, the FERC has eliminated federal rights of first refusal by adopting a framework for qualification criteria and protocols to govern the submission and evaluation of proposals for transmission facilities in the regional transmission planning process.

The FERC found that there is sufficient justification and reasonable expectation that competition would have beneficial impact. After previously rejecting change on the assumption that the existence of multiple transmission developers would lower costs to customers, the FERC decided that the federal right of first refusal is unjust and unreasonable because it "may result in the failure

⁹ Approximately \$AUS0.7-5.4 billion

¹⁰ Order No. 1000 is a Final Rule that reforms FERC's electric transmission planning and cost allocation requirements for public utility transmission providers. The rule builds on the reforms of Order No. 890 and corrects remaining deficiencies with respect to transmission planning processes and cost allocation methods (<http://www.ferc.gov/industries/electric/indus-act/trans-plan.asp>)

to consider more efficient or cost-effective solutions to regional needs and, in turn, the inclusion of higher-cost solutions in the regional transmission plan.”¹¹

As a result of the rule change, transmission developers can innovate potential solutions for consideration in their regional transmission planning processes. It also allows new and incumbent transmission developers to share similar benefits and obligations to construct and own transmission facilities.

Alberta Electric System Operator (AESO)

The Alberta Electric System Operator (AESO) is currently establishing a competitive process to determine eligibility to apply for the construction and/or operation of transmission facilities¹². Incumbent transmission facility owners (TFOs) and new market entrants would bid on an asset, and be responsible for all activities - engineering, procurement, construction, ownership, as well as operation and maintenance. Costs resulting from the competitive process would require approval from the Alberta Utilities Commission (AUC), and any approved project costs would be recovered in AESO's Independent System Operator tariff.

3.3 Competitive framework for new connections

Effective competition must be the cornerstone of the connections and planning frameworks.

This can be more easily achieved in the connections space.

AEMO submits that a platform for the efficient provision of network services, be it by the incumbent asset owner or a third party, should support choice for generators and optimise the involvement of AEMO, as the independent planning body and system operator, to promote cost-effective network investments.

As outlined in our previous submission and our submissions to the AEMC's Transmission Frameworks Review, an economic benefit from competitive provision of transmission services removes the need to price a plurality of tenders as there is an incentive to keep costs down.

3.3.1 Reduction of connection costs

When generators request connection, they should have the option of procuring all network services associated with their connection, be they shared network or connection services, or contracting with incumbent network service providers to provide those services on a fair and reasonable basis.

AEMO's preferred model allows the generator to have the right to determine who should build, own and operate the assets. Where generators are responsible for the funding of the investment, they should have the right to determine these elements within a framework that ensures technical requirements are maintained and the efficient development of the power system is encouraged.

3.4 Competitive connections nationally

Power system risk when connecting an asset is effectively managed with assets designed and installed by third parties needing to comply with the National Electricity Rules and other standards pre-agreed with AEMO. The ongoing maintenance and operations of the assets will then be transferred to an existing asset owner with the authority to own and operate a transmission system in the NEM.

Given the competitive advantages and information asymmetry that favour the incumbent network service provider, AEMO believes that effective competition in the provision of network services can only be implemented nationally under the oversight of an independent party with sufficient technical expertise.

¹¹ FERC Final Rule Order 1000, P264

¹² NERA report on International Review of Planning Arrangements for the AEMC's Transmission Frameworks Review

If generators were to be given the option of obtaining the relevant authorisations, as required of the jurisdiction they are connecting, to build, own and operate transmission assets, legislative changes would be required to address existing cross-ownership restrictions.

Such a framework would also be beneficial for large or inter-state investments. The larger the project the greater the potential for competition to deliver benefits.

A comparison of competitive tenders in Victoria demonstrates this.

Table 2 –Comparison of Victorian competitive tender costs

[Confidential — supplied under separate cover]

4 Interconnector investment

AEMO welcomes the Productivity Commissions' insight into the nature of interconnection in the NEM. Despite the implication of the Terms of Reference, an "interconnector" is not a physical wire crossing a state border. In fact, it is simply a mathematical representation, within the dispatch engine, of the capacity of the entire network to transfer energy from one Regional Reference Node (RRN) to another, subject to the constraints of that network and the generator dispatch pattern at the time.

The Productivity Commission have correctly recognised that efficient and competitive inter-regional trading is affected by:

- Market design issues, in the context of disorderly bidding and dispatch, and the inability to gain reliable basis risk protection through the Settlement Residue Auction (SRA) instrument.
- Complex network interactions deep within the regions.

Regarding market design, AEMO concurs with the Productivity Commission's conclusions regarding the need for a market design resolution.

Regarding complex network interactions, AEMO suggests this underscores the need for a more national context to transmission planning.

NEM commentary suffers a widespread misconception that interconnectors in fact are discrete assets joining two transmission network service companies, distinct from the meshed networks within each transmission company. This misconception can lead to a belief that national planning need be directed to these "interconnector assets" alone, allowing local experts to work within their own territories with only marginal interaction with a national plan. However, as the Productivity Commission has shown, the limits to flow between regions have little to do with assets located near the border, nor even in the main pathways between load centres.

The nature of AC electricity networks is that all parts are highly interdependent, such that an efficient outcome can only come about through the co-ordination of all elements. This has been widely accepted and adopted in real-time NEM operations since 1998: there is a single operations management structure. Contrast this to the disaggregated US Regional Transmission Operators' structure, where the lack of co-ordination contributed to the 2003 US blackout. In the NEM it has however not been accepted in planning, although the network effects parallel those in operations.

The Productivity Commission's final report can assist by resolving this misconception.

The terms of reference given to the Commission suffered from the misconception by singling out "interconnector investment" as the only matter for investigation. AEMO supports the Productivity Commission's recognition that a minimalist interpretation of this would not be useful. The finding however:

"...the current physical capacity of interconnectors is reasonably appropriate."

could reinforce the misconception.

Again, AEMO concurs that the market design issues around bidding and dispatch are contributing to poor outcomes and need to be addressed. Unfortunately however, the market design issues are complicating and confusing the question as to whether the underlying network is efficiently built. It may be that upon resolving the market design problem, whilst some of the egregious events will be resolved, an inefficient underlying network will remain. Until one organisation is in a position to take a holistic view of the entire network, it will be difficult to ever determine whether the residual network is truly optimal.

AEMO has two concerns in relation to the finding:

- That the wording implies that discrete interconnector assets can be defined distinctly from the rest of the network.
- That the Productivity Commission has been able to identify the capacity of the underlying network after unravelling it from the confusion created by the market design problem and state-based planning. AEMO suggests that only after resolving these matters can a definitive conclusion be formed.

4.1 Efficient use of Interconnectors

AEMO welcomes the Commission's insight into the market design problem that is presently inhibiting efficient and competitive inter-regional trade. The Productivity Commission's has recognised the serious detrimental outcomes of what is known as "disorderly bidding":

- Reduced physical energy flows between regions, as intra-regional sources gain preferred access over inter-regional sources.
- Inability for participants to use the SRA for its intended purpose: as an instrument to hedge inter-regional basis risk.
- Negative settlement residues, whereby customers in an exporting region, who in no way contribute, participate nor benefit from the behaviour, are used as a convenient funding source, ultimately benefiting those generators who disorderly bid.

In particular, AEMO welcomes the Productivity Commission's observation that whilst the incidence of such events, measured in total hours, may be low, it is more likely to be during periods of high demand, and that "Ironically, it is precisely at these times when interconnectors should be in most use."

Short lived extreme events will naturally be the focus of participants assessment of trading risk. If the SRA is considered to be unreliable during these times, then it cannot be relied upon to underpin national competition.

AEMO concurs that the size of the problem warrants a generalist solution. Although the problem emerges in new locations of the NEM from year to year, it does not diminish. Most recently, otherwise minor events of congestion in the central Queensland region has frequently triggered widespread disorderly bidding across Queensland, severely impacting interconnector performance and producing negative residues. This is despite subdued Queensland demand which would be expected to reduce the prevalence. The AER have submitted an analysis of recent events to the draft report and we encourage the Productivity Commission to consider this evidence regarding the materiality of the enduring problem.

The severity of the problem may warrant transitional solutions if the more profound changes to deliver optional firm access and co-ordinated generator-network planning take time to be delivered. We would recommend that any short-term solution should be part of a staged implementation of a total solution.

AEMO concurs with the Productivity Commission's conclusions regarding the SRA, in that its high payout rate indicates it is seen as a speculative, rather than insurance, instrument, and that this has profound consequences regarding the ability of the interconnectors to support national

competition. AEMO refers the Productivity Commission's to the AER's analysis of payouts¹³ which demonstrates this trend strongly, with payouts averaging 143% of proceeds from 2004.

5 Optional Firm Access and Transmission Planning

AEMO welcomes the Productivity Commission's Draft Recommendation 18.1 which states that should the AEMC's Optional Firm Access (OFA) package be implemented, the arrangements and its effects on planning and performance be monitored by AEMO.

AEMO in principle supports a financial access arrangement. However AEMO is concerned that the AEMC's OFA proposal requires generators to negotiate firm access with incumbent TNSPs which will simply compound the disadvantages that generators face in all jurisdictions, other than Victoria. These include dealing with limited transparency from monopoly service providers, who in many cases are not motivated to seek timely or cost effective solutions for connecting generators, thereby undermining the potential economic benefits of a financial access regime.

AEMO considers that such solutions would be best addressed and decided by an independent body, not influenced by maximising its own profits, but by wider national electricity market and efficiency perspectives.

5.1 Implications of the AEMC's Optional Firm Access arrangements

The proposed OFA regime would have significant implications for transmission network planning and development. The current revenue setting arrangements encourage TNSPs to remain low risk asset owners and investors. As a result, they are likely to take risk-averse positions when conducting their network analysis and propose conservative, and potentially expensive, investments to back any OFAs.

Because the proposal maintains the linkage between rights and investments, AEMO does not consider that there is any conflict in AEMO issuing rights. Rather, it could provide real advantages to generators and to customers for an independent party to be making the decisions on the most effective way to provide OFAs and then procuring those works and services in the most cost effective manner.

Apart from network planning and development implications, the proposal also has profound implications for the regulatory regime. The current revenue setting arrangements are designed to cope with incremental demand growth and clearly defined reliability standards. To date, this has proved challenging due to the information asymmetry problems. The proposed arrangements will exacerbate this problem and will require the regulator to scrutinise costs the transmission businesses charge to generators wanting access arrangements to ensure these are not overpriced.

5.2 AEMO's preferred financial access rights arrangements

The AEMC have recommended that TNSPs plan and operate the network to deliver any contracted firm access. AEMO reiterates that the success of a tradeable financial access model depends on the ability of generators to negotiate financial access. It is likely to be severely compromised if those negotiations have been undertaken with profit-driven, monopoly transmission asset owners.

The NEM involves multiple network owners with both network planning and management functions. This has major implications for the provision of financial access rights since the existing (multiple) network owners would be unwilling to accept any risk in relation to the provision of financial access rights since they would be unwilling to accept any risk in relation to the provision of financial access both for interconnectors and for generators within a region. This is because the

¹³ See <http://www.aer.gov.au/node/9771>

ability of a particular network owner to provide non-constrained operation may depend on an adjacent network's adequacy from a planning viewpoint and its performance and operation.

In order to provide access to cover the planning risk and to ensure that the locational price signals for generators were preserved, it would be necessary to have primary input to the planning of a co-ordinated network to manage the planning risk. In addition, the integrated nature of the networks and the potential for investment in one region to impact the performance in another can make an approach difficult to administer where there are multiple network planners and operators. This is particularly in the case of interconnectors where investment decisions by two regions will impact the outcomes in both regions.

An approach which would deliver more efficient outcomes for the market would be for access rights to be issued by a national independent transmission planner-decision maker who is not biased towards overbuilding the transmission network. Having an unbiased party who delivers the access rights would also provide greater confidence to generators that the cost of their access arrangement is not overpriced. As such, a sound basis for the tradeable financial transmission rights regime will be provided and investments will be priced at an economically efficient level. This proposal also aligns with the Productivity Commission's Draft Recommendations 15.1 and 18.1.