AEMC

REVIEW

Australian Energy Market Commission

FIRST INTERIM REPORT: OVERVIEW REPORT

Optional Firm Access, Design and Testing

24 July 2014

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First Interim Report: Overview Report

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

Contents

1 Introduction

The National Electricity Market (NEM) is currently experiencing a period of significant change - patterns of network flows, and forecasts of future generation are uncertain. Climate change policies and technological developments are affecting the supply and use of electricity.

1.1 An adaptable and resilient market is required to manage change in the sector

Change will be a continuing feature into the future; what the future holds is uncertain. The electricity sector's evolution will depend on a number of factors, which can include: policy settings, the growth of local generation, structural changes in the gas sector, new patterns of consumption and technological change.

The Australian Energy Market Commission (AEMC or Commission) considers that we need a resilient, sustainable market, which is able to support economic growth. This is reflected in one of our strategic priorities: developing market arrangements that encourage efficient investment and flexibility.[1] The market should be capable of adjusting to change efficiently with respect to price and reliability outcomes in response to whatever the future holds (including the level of growth and pattern of future demand, technology, relative prices emerging between different types and locations of new generation). A market that is able to adapt to changing conditions will deliver better outcomes for consumers.

We are currently developing the detail of the optional firm access model initially proposed as part of the AEMC's Transmission Frameworks Review. We are also assessing the impacts that implementing the model would have on the market. The optional firm access model would introduce more commercial drivers on transmission businesses, and more commercial financing of transmission infrastructure. This approach should minimise the total system cost of building and operating both generation and transmission over time, and so potentially minimise prices for electricity consumers in the longer term.

1.2 Optional firm access and other Commission work

This work can be seen as part of a broader package of work that the Commission is undertaking to develop the energy market to face the future. Other such projects that the Commission is currently undertaking include:

- The Financial Market Resilience review, which is considering whether the financial relationships and markets underpinning the NEM are sufficiently robust to manage the financial consequences of unexpected events.

1 See: http://www.aemc.gov.au/Markets-Reviews-Advice/Strategic-Priorities-for-Energy-Market-Develop-(1).

- The Competition in Metering and Related Services rule change request, which is considering implementing arrangements that would support a competitive market for the provision of metering and related services.

We have set out in our First Interim Report a "progress update" of the work we have done since receiving the Terms of Reference. Among other things, it describes changes we propose to the optional firm access model that was described in Table 10.1 of the Transmission Frameworks Review final report. This Overview Paper presents a summary of what is contained in the First Interim Report.

2 Background to the review

2.1 Transmission Frameworks Review

The COAG Energy Council (formerly the Standing Council on Energy and Resources) directed the AEMC in April 2010 to undertake a review of the transmission frameworks in the National Electricity Market (NEM) in the context of changing patterns of generation and demand.

Specifically, the AEMC was to:[2]

- review the current arrangements for the provision and utilisation of electricity transmission services and the implications for the market frameworks governing transmission investment in the NEM; and
- recommend any changes, which would better align incentives for efficient generation and network investment and operation with a view to promoting more efficient and reliable service delivery across the integrated electricity supply chain.

The focus of the review was on the interface between transmission and generation, including how generators connect to the transmission network, how they access the wholesale market via transmission, the way network congestion is managed, what charges generators should face for transmission, and how the network is planned.

2.2 Problems with existing arrangements

The Transmission Frameworks Review identified that currently decisions about investment in electricity generation and transmission infrastructure occur through different processes:

- Investment in generation assets is market-driven and takes into account expectations of future demand, the location of the energy source, access to land and water and proximity to transmission.
- Investment in transmission is centrally planned according to a cost-benefit test. Transmission businesses are subject to an incentive-based economic regulatory regime.

The interaction between competitive and regulated electricity sectors has been problematic around the world. Without effective integration between the transmission and generation sectors there is potential for a lack of co-ordination and inefficient outcomes. This has long been recognised in the NEM.

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2 Ministerial Council on Energy (MCE) direction, p. 3. The full MCE direction is available on our website:

This can impact consumers. Whenever the regulated planning approach delivers a transmission path that is not co-optimised with generation investment, the result is a higher combined cost of generation and transmission than could otherwise be achieved. These costs are borne largely by electricity consumers, who have only limited influence on these investment decisions. Therefore, the allocation of risks between generators and consumers are not aligned in these processes, with consumers bearing the risk of inefficient transmission decisions.

The differences can also limit the ability of generators to export electricity, or lead to inefficient investment in transmission networks to alleviate capacity constraints:

- Generation investment decisions are more risky due to volume uncertainty and price volatility:
  - generators' uncertainty as to whether they will be able to generate and receive the regional energy price - at exactly those times when prices are likely to be particularly high - can decrease their willingness to contract with retailers, or increase the price at which they are willing to do so; and
  - such uncertainty may decrease generators' willingness to invest in new generation.
- The regulated planning approach has the potential to distort competitive market outcomes in terms of generation investment. A Transmission Network Service Provider (TNSP) knows the costs of transmission, but has imperfect information regarding the costs of generation.
- Given the above, generation investment may not align with the development path predicted by the TNSP. While, currently, certain locational signals are provided, these are incomplete as they do not signal the long-term costs of transmission.
- Scarce transmission capacity in a given region can limit the ability of some generators to sell their energy at the regional wholesale price. During times of congestion, generators have an incentive to offer their electricity in a non-cost reflective manner, which may lead to the dispatch of needlessly costly generation.
- The current market arrangements mean it is less risky to contract within a region than between regions. The existing settlement residue auction units designed to allow market participants to hedge the risk associated with trading between two differently priced regions are not a firm hedge. This impedes inter-regional trade, potentially reducing competitive pressures on both generators and retailers in a given region.

http://www.aemc.gov.au/getattachment/b3a6c99a-e853-4b30-b8dc-5f2dceaf1127/MCE-Terms-of-Reference.aspx.

- Generators may also currently have an incentive to locate on interconnector flowpaths in order to take advantage of the large capacity available. This would also diminish flows across the interconnector, further impeding inter-regional trade.

2.3 Development of optional firm access

A key finding of the Transmission Frameworks Review was that it is not possible to address any one element of the transmission frameworks in isolation. Therefore, the Commission developed an integrated package for the market, termed *optional firm access*, to address the problems with the current arrangements that were set out above.

This optional firm access model could transform the way generators access the market during times of congestion and the way transmission investment decisions are made. Accordingly, the model has the potential to minimise prices for electricity consumers in the longer term by minimising the total system cost of building and operating both generation and transmission over time.

The Commission considered that optional firm access model could provide a more robust set of transmission frameworks, whatever the future. However, we expected that the associated benefits would be greater in a future that involved more change from current patterns of demand and generation.

The optional firm access model is discussed further in section 3 below.

2.4 Transmission Frameworks Review recommendation

In April 2013, the AEMC completed the Transmission Frameworks Review, with the final report setting out our findings as discussed above.

The Commission considered it reasonable and prudent to progress the optional firm access model, but also noted that implementing it would be a fundamental change to the market and would not be without risk. The Commission therefore recommenced further work on the detailed design and testing of the optional firm access model. This would allow for a better assessment of the costs and benefits associated with the model.

In order to form the basis for future work, Table 10.1 of the final report categorised the optional firm access model into:[3]

- core elements - which are those that are central to the operation of the model;
- recommended elements - which are those that should form part of the final design, but require further work to establish whether or not they are workable and so require some modification; and

3 AEMC, *Transmission Frameworks Review*, Final Report, 11 April 2013, pp. 126-134.

- optional elements - which are those that may be potentially beneficial, but would require further work to establish whether they are workable and so should form part of the final design of the model.

3 What is optional firm access?

Optional firm access would allow generators to choose to pay for a specified level of access to the transmission network in order to manage the financial impacts of network congestion. This would require them to make payments, which would be used to fund and guide the way that transmission is developed, and so more transmission investment would be driven by commercial decisions on the part of the generation businesses. This would shift some transmission investment risk away from consumers.

3.1 Objectives of optional firm access

The optional firm access model is intended to provide an increased level of integration between transmission and the wholesale electricity market. In the Transmission Frameworks Review we identified that the key objectives to be achieved through the implementation of optional firm access would be to:

- provide a more commercial framework for the planning of the transmission network, including the ability for generators to plan for the necessary transmission augmentation to provide their access and connection requirements;
- provide locational signals based on the transmission costs for the siting of new generators;
- provide incentives for TNSPs to manage the congestion on the networks, including those resulting from transmission outages to minimise the impacts on market participants;
- facilitate economic bids from generators, by removing the perverse incentives in the current market for uneconomic bidding behaviour;
- provide a basis to encourage inter-regional trade and identify the value of upgrading interconnector capability, as well as protecting existing interconnector capacity.

3.2 How does optional firm access work?

Under the optional firm access model, generators would have the ability to purchase a specified level of financial access rights to the transmission network. In the event of a transmission constraint that binds and so limits the generator's output below the level of access that they have purchased the "firm" generator is entitled to receive any difference between the regional energy price and a price calculated at the generator's local connection point, irrespective of whether it was dispatched.[4] These rights would therefore enable a generator to manage its volume risk. It would only have value in the

4 Where there is congestion the local price would be different to the regional price, and in the absence of optional firm access a generator could only receive this local price.

presence of network congestion; in other circumstances, the local price would equal the regional price.

There would be no obligation on generators to purchase access rights. However, if a "non-firm" generator without rights was dispatched ahead of a firm generator such that the firm generator's local price diverged from the regional price, the non-firm generator would be required to fund the payment made under the firm generator's access right. The result would be that, while they would normally receive the regional price, in the presence of congestion non-firm generators may be settled at a price less than this. However, they would never receive less than their local price, which means that they would never make a loss from being dispatched.

Access rights, although a financial product, would be underpinned by transmission capacity. Generators procuring access rights would pay a charge reflecting the costs associated with the expected transmission investment. In the event that the unavailability of transmission capacity resulted in congestion, the TNSP would make a contribution towards the compensation paid to firm generators. This would also have the effect to incentivising TNSPs to maximise the availability of transmission capacity at the times it was most valuable.

3.3 Potential benefits of optional firm access

The implementation of optional firm access is intended to strengthen the level of integration between the transmission system and the energy market compared to the current arrangements. It has the potential to provide a range of improvements in market outcomes, such as improved coordination between the transmission sector and the energy market. The following improvements could be achieved through implementation of optional firm access:

- *Generation and transmission location.* All generators would face clear signals relating to their location on the transmission system. They would have incentives through competition to minimise the combined lifetime cost of generation and transmission, and of other energy networks - such as gas pipelines - where they use them.

  A defined service would be provided to generators (and generators would have the ability to indicate that they would value such a service being provided). This would allow generators to manage the risk associated with network congestion. This should decrease the risk premium included in the price of contracts sold by generators. There would be strong incentives on TNSPs to provide the access service at a specified quality level.

- *Efficient levels of transmission development.* In choosing whether to acquire firm access, generators would trade off the cost of transmission with the avoided cost of congestion. The result should be an efficient level of transmission development.

- *Risk for consumers from investment decisions.* The owners of generation businesses would bear the costs of transmission development undertaken to support their access decision, rather than consumers. Competition is likely to limit their ability to pass through the costs of inefficient decisions to consumers.

- *Operation of transmission networks.* The optional firm access model would result in a measurable outcome from TNSPs' operation of their network. Incentives would be placed on them to maximise the availability of their network when it is most available to the market.

- *Support for inter-regional trade.* The optional firm access model would support trade between generators and retailers in different regions of the NEM for two regions. First, it would provide a firmer hedge against inter-regional price differences than is currently available since transmission businesses would be required to maintain a certain level of capacity to meet both intra-regional and inter-regional firm access requests. Second, to the extent there are currently incentives on generators to locate along interconnector flowpaths, generators would be exposed to the costs imposed on the transmission network of doing so.

- *Financial certainty for generators.* Giving generators the ability to secure firm access should create more revenue certainty. This may result in a lower risk-adjusted cost of capital, resulting in lower financing costs for power stations. Decreased risk may also increase the willingness of generators to contract with retailers at a given price.

- *Efficient dispatch.* The current incentive for generators to engage in bidding behaviour that relates to managing or exploiting network congestion (eg, generators offering in prices of -$1,000 to guarantee dispatch) would be reduced. Such an outcome would promote efficient dispatch.

4 Terms of Reference and our process

4.1 Terms of Reference

As requested by the COAG Energy Council we are currently developing, testing and assessing the optional firm access model that was initially proposed as part of the Transmission Frameworks Review. As set out in the Terms of Reference, we will:

- confirm or modify the design of the optional firm access model as a result of testing and evaluation;
- assess whether implementing optional firm access is likely to contribute to the National Electricity Objective;
- engage with industry participants and governments to build understanding of the model and the potential impacts of its implementation; and
- recommend to the COAG Energy Council whether to implement optional firm access, and if so, how it could be implemented.

Significantly, the terms of reference referred to the model of optional firm access as set out in the Transmission Frameworks Review final report (Table 10.1) and directed us to build on this.

The Australian Energy Market Operator (AEMO) also received a terms of reference to undertake its own review, which complements that received by the AEMC. AEMO's work focuses on the "access settlements" component of optional firm access, and what variations to the access settlement mechanism would be necessary for a staged implementation of the optional firm access model.[5]

4.2 Our approach to addressing the Terms of Reference

The National Electricity Objective (NEO) provides overall direction for the work we do as part of this project. In particular, and as required by the Terms of Reference, we have developed an assessment framework based on the NEO which guides our work on both the design of optional firm access and also our recommendation as to whether optional firm access should be implemented.

We have given consideration to whether it would be more appropriate to commence our work by focussing exclusively on either developing the design of the model or assessing the impacts of optional firm access. Our conclusion has been that the inter-relationships between the design and the assessment aspects of the project are such that it is necessary to consider both aspects concurrently. Among other things, the impact of optional firm access on the NEM will depend on the design that is chosen.

5 Further details on AEMO's work on optional firm access can be found here: http://www.aemo.com.au/Electricity/Market-Operations-Optional-Firm-Access.

That said, to date we have focussed more on the design of the model than the assessment of impacts.

Regarding implementation, we are scoping the possible options for how this might work. These include some implementation options that are specifically referred to in the Terms of Reference. We acknowledge that implementation issues are significant and will be taken into account in deciding whether to proceed, and not only after the decision to proceed has been taken.

There are a number of references in the Terms of Reference to table 10.1 in the Transmission Frameworks Review final report. This is the starting point for our work on the design of the optional firm access model. We have taken the view that the Terms of Reference does not allow us to fundamentally redesign the optional firm access model.

Equally, however, references in the Terms of Reference to modifications to the optional firm access design indicate that some movement away from the core elements of table 10.1 is permitted where further analysis and testing reveals improvements can be made. Where we do consider modifying a core element of table 10.1 we will test this with stakeholders and explain why we consider the change would be beneficial.

Consistent with the Terms of Reference, we are not considering significant changes to the optional firm access model as set out in the Transmission Frameworks Review. Therefore, we are not seeking stakeholder comments on the core elements of the Transmission Frameworks Review that we provide as background in the First Interim Report, except where we have specifically proposed amendments to such core elements.

5 Overview of First Interim Report

5.1 Summary of First Interim Report

The First Interim Report represents a "progress update" to obtain stakeholder input on the work we have done since receiving the Terms of Reference. The focus at this stage has been on further developing certain "core" elements of the design of the optional firm access model. We have also included our initial approach for assessing the impacts of the optional firm access model, and implementing the optional firm access model.[6]

Below we set out a brief summary of the First Interim Report.

5.2 Assessment framework

In order to conduct our assessment for this project, we have identified the potential categories of impact that optional firm access would likely have on investment in, and operation and use of, transmission and generation. These are (in no particular order):

- financial certainty for generation;
- effective inter-regional hedging;
- efficient incentives on TNSPs to operate the network;
- efficient dispatch of generation;
- efficient incentives on TNSPs to manage trade-offs between operation and investment;
- efficient investment in new network capacity;
- efficient investment in new generation capacity, including locational signals on where to build plants; and
- efficient allocation of risk.

We will also consider the level of transaction costs, such as one-off and on-going costs.

When conducting our assessment we will seek to assess the impacts - both positive and negative - within these categories. We will seek to quantify such impacts - but we recognise that in a number of instances this may not be possible, and so a more

6 It is important to distinguish transition from the implementation process. Here, "implementation" refers to the order and timing by which the various elements of the optional firm access model can be introduced, including whether it is implemented in all regions or just some. The "transition" process is a component of the overall implementation design.

qualitative assessment will be done. These impacts will be assessed against the counterfactual of the current arrangements for transmission and generation continuing.

It is difficult to assume a single view of the likely future change in the market. Accordingly, the Commission wishes to assess the optional firm access model across a number of scenarios, which will ensure that the model is robust to a number of future changes.

5.3 Firm access standard

The firm access standard represents the level of access that TNSPs would be required to make available for firm generators. It translates the level of access that generators are entitled to (through their access arrangements) into the level of transmission capacity that TNSPs are obliged to provide. This is an integral part of the optional firm access model, since it provides generators with confidence in the effective provision of the firm access product, as well as driving efficient network planning and operation by the TNSPs.

In the Transmission Frameworks Review we recommended that the firm access standard and related TNSP obligations would only apply during defined normal operating conditions. During abnormal conditions, the standard and obligations would not apply. However, we have found that it would be simpler for the firm access standard to apply at all times, which also avoids the need for an arbitrary decision about what is normal and what is abnormal.

Accordingly, our revised firm access standard applies at all times. The proposed firm access standard would have two components:

- a firm access planning standard, which would be a requirement on the TNSP to plan the network so that all firm generators would receive the full amount of access under specified conditions. We expect that the conditions used in specifying the firm access planning standard would be determined with reference to the expected occurrences of material constraints in a region; and

- a firm access operating standard, which would set a target operating condition for the TNSP to meet. The firm access operating standard would always apply regardless of prevailing market conditions, ie it would apply in both normal and abnormal operating conditions. It would be underpinned by the TNSP incentive scheme, which is discussed below.

This proposed firm access standard modifies some of the core elements of Table 10.1. However, we consider that the revised firm access standard has a number of benefits. For example, the revised firm access standard would provide increased financial certainty to generators, as well as reducing transaction costs associated with the implementation of the model.

The firm access standard would be a key determinant of the take up of firm access by generators. Ultimately, the purchase of access would benefit consumers through minimising overall system costs.

5.4 TNSP incentive scheme

Underpinning the revised firm access operating standard is the TNSP incentive scheme. This incentive scheme is designed to encourage TNSPs to make efficient decisions in operating their network, ie, to trade-off rewards and penalties under this scheme against the risks they face.

This incentive scheme has evolved since the scheme proposed in the Transmission Frameworks Review. This is to align the scheme with the proposed revised firm access standard, which applies at all times.

The incentive scheme would aim to filter out - as far as possible - the unmanageable risks for the TNSP (for example, the timing of forced outages), while leaving a TNSP exposed to manageable risks (for example, the timing of planned outages). The incentive scheme would provide a continuous incentive on TNSPs to provide transmission capacity to underpin access agreements.

The incentive scheme could operate as follows:

- through the incentive scheme the TNSP would be exposed to the market impact of constraints occurring[7] - the TNSPs' penalties would be based on this;
- the TNSPs' could also potentially receive a reward where they provide a higher level of access consistent with what a generator values;
- firm generators would receive TNSP penalties, and could pay TNSP rewards;[8]
- a series of "nested" caps and collars - effectively caps and collars that are placed inside one another, eg, within the annual cap there may be monthly caps, and then daily caps and so on - would be included in the scheme to limit TNSP risks and rewards, while aiming to ensure that incentives continue over the full year; and
- incentive scheme parameters could be set by the Australian Energy Regulator at each revenue reset.

In the First Interim Report we set out two options for how such a scheme could be given effect:

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7 This is expressed in the optional firm access model as a "shortfall cost". This is the cost to firm generators of shortfalls of transmission capacity resulting in entitlements, and so compensation, being scaled back beyond what should have been delivered under the firm access standard.

8 This is designed to place an incentive on the TNSP to provide a continuing level of access. It is not intended that this incentive scheme would provide generators with a sufficient level of compensation to make them "whole".

- Option 1- where a *target* shortfall factor is set, and TNSP payments would be calculated and settled through access settlement; and

- Option 2 - where an *annual* target shortfall amount is set, and TNSP payments would be calculated and paid on an ex post basis at the end of the year.

Such an incentive scheme would also benefit consumers since TNSPs are encouraged to operate their network more effectively. The Commission considers that low powered incentive schemes have powerful effects on TNSP behaviour. More efficient operation of the network by a TNSP would have flow on consequences to consumers, since reductions in transmission costs should be passed through to consumers through reduced TUOS.

5.5 Inter-regional firm access

The optional firm access model proposed here includes both a short-term and long-term inter-regional access product. These represent firmer inter-regional access products than are currently available (ie, the inter-regional settlement residues). The reason for this increased firmness is that the access product under optional firm access does not depend on flows across the interconnector.

Such a product may also be beneficial for consumers. This enables them (through retailers) to have access to cheaper generation in a neighbouring region.

We recommended an issuance process for inter-regional firm access in the Transmission Frameworks Review.

Long-term inter-regional firm access would be offered, and issued, through an auction. This is considered appropriate since it is seeking to bring together a large number of interested parties - any market participant can purchase inter-regional access. The auction would be designed to signal interest in expansions of capacity and so would drive long-term inter-regional investments.

Short-term inter-regional firm access could be offered, along with short-term intra-regional access, in a separate auction. This is discussed further below.

5.6 Short-term firm access

In addition to the long-term firm access product, the optional firm access model also includes a short-term firm access product. We understand that such a product is attractive to some existing generators - both intra-regionally, and inter-regionally. It also encourages TNSPs to think about the most efficient use of their network. There would be no obligation on the TNSPs to build their networks to provide additional capacity in order to issue short-term firm access. Instead, they would be encouraged to undertake operational activities to release such access where this was efficient.

The means of issuing and procuring short-term access differs from those for long-term firm access. Apart from that, short-term and long-term access function in the same way

- they entitle the holder to be paid through access settlement when the generator is not dispatched because of congestion.

Under our proposed approach to short-term access we consider that:

- short-term firm access and long-term firm access issuance timescales could be differentiated by the assumed transmission expansion lead time: short-term firm access would only be issued for earlier periods than this, and long-term firm access would only be issued for later periods;
- short-term firm access could be issued through regular auctions;
- short-term access could have equal firmness to long-term firm access; and
- to the extent possible, intra-regional and inter-regional short-term firm access could be integrated within a single auction.

This proposal has aimed to simplify the recommendations relating to short-term firm access that were discussed in the Transmission Frameworks Review.

5.7 Access settlement parameters

The Transmission Frameworks Review set out the recommendations for access settlement within the optional firm access model, which is the process under which dispatched non-firm generators would compensate firm generators that have not been dispatched due to a binding constraint.

AEMO's development of the access settlement regime has presented a number of technical issues that were not examined in the Transmission Frameworks Review. Therefore, we set out a number of policy developments related to technical issues of access settlement (for example, the definition of capacity which is used in access settlement to limit entitlements), which have needed to be resolved in order for AEMO to develop the settlement algebra.

5.8 Transition

A transitional period would apply in the early years following implementation of the optional firm access model. This would provide a learning period and other assistance for participants to adjust to a significant regulatory change in the market while at the same time not delaying or diluting the benefits that the optional firm access model is intended to promote.

The main transition mechanism is the allocation of transitional access to existing generators. Transitional access would act identically to the firm access service except that access (to the extent allocated) would not need to be procured from a TNSP. This allocation should reflect the level of access generators currently experience.

The other transition mechanism is how the initial allocation of transitional access should be "sculpted" over time.

In deciding on the transitional access sculpting methodology that best serves the long-term interests of consumers, an inherent trade-off needs to be made between:

- managing the commercial and financial impacts of optional firm access on existing investments; and
- encouraging market participants to purchase the level of firm access that they value.

We do not favour a model that grandfathers access rights in perpetuity. This would risk giving existing generators more transitional access than is necessary to address any regulatory risk.

Therefore, we set out that it is justifiable for transitional access to be sculpted back over time and to expire prior to some reasonable expectation of an existing power station's economic life.

5.9 Implementation

Under the Terms of Reference, we are required to develop a set of options for how optional firm access could be implemented. There are many elements of optional firm access, which can be introduced at different times, and in different regions to others.

We note that an implementation approach is only needed if the advantages of optional firm access outweigh the costs.

We consider that there are three high-level implementation options:

- *simultaneous implementation* of all core elements of optional firm access, where all elements of the model are introduced at the same time;
- *temporal staging* of all core elements of optional firm access, where the elements of the model are introduced at different times (but the decision is made at the beginning to introduce all of the elements in this manner); and
- *geographic staging* of all core elements of optional firm access, where the elements of the model are introduced into different jurisdictions at different times (but the decision is made at the beginning to introduce all of the elements in this manner).

The way optional firm access is implemented impacts on how successful it will be, and how soon the benefits would be realised. The sooner such benefits are realised, the quicker customers will benefit. The full benefits of optional firm access can only be realised when all core elements have been implemented in all jurisdictions.

5.10 Recommended elements

We have also undertaken some further work on "recommended" elements on the optional firm access model. These are elements of the model that could be beneficial but which are not critical to the model's operation and could be put in place at a later stage. This is discussed further in Appendix A of the First Interim Report, and we welcome stakeholder feedback on whether our allocation of elements to "core" and "recommended" is correct.

6 Submissions

Written submissions from interested stakeholders in response to the First Interim Report must be lodged with the AEMC **by no later than 5pm, Thursday 4 September 2014.**

Submissions should refer to AEMC project number "EPR0039" and be sent electronically through the AEMC's online lodgement facility at www.aemc.gov.au.

All submissions received during the course of this review will be published on the AEMC's website, subject to any claims of confidentiality.

A Our process

A.1 Updating the COAG Energy Council

We are updating the COAG Energy Council regularly during this project, including at COAG Energy Council meetings and in the event that there are significant changes in the project.

We also update the Energy Market Reform Working Group regularly.

A.2 Reports to be published

To explain the progress with our work and to seek stakeholders' views on our analysis and conclusions, we will publish a series of reports as part of this project. This is the first such report to be published. The timing of key publications is set out below.

Table A.1 Review process

Document	Purpose	Date
First Interim Report	To present the assessment framework, and provide a progress update on our work.	24 July 2014
Supplementary Report: Pricing	To provide a progress update on the work we have done to date on pricing[9] since the Transmission Frameworks Review. We will also publish a pricing model prototype for participants to consider.	Late August 2014
Second Interim Report	To set out: • our draft recommendation as to whether or not optional firm access should be implemented; • our draft assessment of the benefits and costs of optional firm access; and • a detailed design of the optional firm access model.	November 2014
Final Report	To set out: • our final recommendation as to whether or not optional firm access should be implemented, and if so, in what form; • our final assessment of the benefits and costs of optional firm access; • a detailed design of the optional firm access model; • draft implementation plans (if required) for how optional firm access should be introduced.	By Mid-2015

9 Under optional firm access, access prices would be calculated using a long-run incremental costing method.

A.3 Working group

In line with the Terms of Reference for this project, the AEMC has formed a working group to provide technical advice and to help with assessing the potential impacts of the optional firm access model on industry. The working group is shared with AEMO, who will also bring matters for discussion.

Three meetings of the working group have been held to date, with the minutes of these meetings available on our website.[10]

A.4 Advisory panel

In line with the Terms of Reference for this project, the AEMC has formed an advisory panel to provide strategic advice on high-level issues.

Two meetings of the advisory panel have been held to date, with the minutes of these meetings available on our website.[11]

A.5 Stakeholder engagement

The reports that we are publishing as part of this project allow stakeholders to understand our work to date on optional firm access and to make comments and submissions on this. We will take these submissions into account in preparing subsequent reports as part of the process.

While this is a critical component of the stakeholder engagement we will undertake on this project, there are other opportunities for stakeholders to engage with us. In particular we are planning to hold a public forum on this First Interim Report on Thursday, 14 August 2014. Further information on this is available on our website.

We may also hold more public forums later in 2014.

A.6 Working with AEMO

AEMO and the AEMC are working collaboratively on this project. Technical matters are being dealt with jointly.

However, the Terms of Reference establish a separate governance and reporting structure for each institution. Therefore, separate reports are being prepared. AEMO has produced a First Interim Report that responds to its separate Terms of Reference

10 See: http://www.aemc.gov.au/Markets-Reviews-Advice/Optional-Firm-Access,-Design-and-Testing#.

11 See: http://www.aemc.gov.au/Markets-Reviews-Advice/Optional-Firm-Access,-Design-and-Testing#.

that it has received. AEMO's report sets out: how it is approaching its work program; and a summary of some early findings and observations.

AEMO and the AEMC have worked together in order that the two reports represent an integrated package.