19 October 2012

John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SOUTH SYDNEY NSW 1235

Dear Mr Pierce,

EPR0019: Transmission Frameworks Review Second Interim Report

Origin Energy Limited (Origin) welcomes the opportunity to contribute to the Australian Energy Market Commission's (AEMC) Transmission Frameworks Review (TFR). The AEMC should be commended for the overall quality of the Second Interim Report (Interim Report) and accompanying papers.

We note that given the likely changes in the generation mix brought on by climate change policies, that it is important that the transmission framework remain robust and that transmission investment is timely and efficient. In our view the current framework has largely shown that it is capable of delivering these outcomes which signals a need for incremental rather than significant changes.

This submission focuses on the three key areas being examined under the review – access, connections and planning. Origin notes that for the most part the TFR to date has looked at the various elements of the transmission framework separately. Going forward it may be useful to further examine the interrelatedness of the various elements and how better synergies can be achieved, which could negate the need for more fundamental changes.

Generally, Origin considers that in the areas of connections and planning the AEMC has identified the pertinent issues that need to be addresses to enhance efficiencies in these areas. In relation to access, however, we note that the proposed Optional Firm Access (OFA) model is a significant departure from the current arrangements. This in itself is not an issue, but we are of the view that the case for such a fundamental change has not been made, and that the advancement of the OFA model in the absence of this, may lead to unintended outcomes. Similarly, an endorsement of the OFA, prior to a thorough assessment of its practical implications and implementation costs would prove premature. A change of this magnitude cannot be justified on purely theoretical grounds. The attached submission sheds light on these issues, and highlights some of the added complexity associated with the model.

If you wish to discuss any of these issues further please do not hesitate to contact me on (02) 8345 5250 or Steve Reid on (02) 8345 5132.

Yours Sincerely,

Tim O'Grady
Head of Public Policy

1. Executive Summary

Network Access

- The adoption of the Optional Firm Access (OFA) model would result in a significant change in the NEM, and thus there should be a reasonably high threshold if it is to be adopted.
- The detailed analysis needed to fully assess the OFA has not yet been undertaken, and in our view the case for a shift away from the current access regime has not been made.
- Origin considers that if adopted, the OFA will introduce a disproportionately high level of complexity into the NEM's operations which is not in line with the issues it seeks to resolve. Given this the OFA is unlikely to meet the requisite criteria needed to warrant its introduction.
- Some of these areas of complexity include that:
    - TNSPs would need to optimise network build in meeting both the reliability standard and the firm access standard (FAS).
    - The allocation of costs to firm generators for augmentations to the shared network could prove difficult, with the calculation of the long run incremental cost (LRIC), far from straightforward.
    - The decision making framework for generators around whether or not to be firm could prove testing in some instances, with negative implications for getting this wrong.
    - The apportioning of costs to non-firm generators at settlement could be challenging given the interrelated nature of more complex constraints.
    - The OFA exposes non-firm generators to their local price which increases un-hedgeable intra-regional basis risk.

Connections

- Generally Origin is supportive of the measures outlined by the AEMC aimed at improving the connections framework through the clarification of the Rules governing the connection process and an increase in transparency.
- The development of a standard contract is useful in that it could serve as a default option and provide a reasonable starting point for connection negotiations, which could result in an expedited process.
- Origin supports the proposal for the connection applicant to have the option of greater involvement in the tendering process. Specifically, we are in favour of TNSPs making tender responses available, and demonstrating that they have taken into consideration the connection applicant's preferences and priorities
- Regarding extensions we agree that where a TNSP is requested to provide an extension by a connecting applicant, they should be obliged to do so.
- Where a connection proponent has built, owned and operated a private transmission line (of any length) to connect to the transmission network, they should not be required to separately register as network service provider or seek an exemption. Such a requirement would only serve to increase red tape and the administrative burden for the connection applicant.

Planning

- Origin is supportive of efforts aimed at improving inter-regional synergies through an enhancement of the national transmission planning function.
- Regarding the development of a NEM wide transmission pricing scheme, Origin is of the view that conceptually there could be merit in developing such a scheme as it could allow for more equitable inter-regional cost allocation.

2. Network Access

2.1 The case for change has not been made

The proposed Optional Firm Access (OFA) model represents a fundamental departure from the current access arrangements, and as such, it is appropriate that there is a reasonably high threshold if it is to be implemented. The AEMC states that there are likely to be some clear benefits from fundamentally transforming the way in which generators access the market and the way transmission investments are made.[1] The analysis presented in the Interim Report, however, does not shed light on the magnitude of these perceived benefits, nor does it set out the potential challenges under the OFA, and how these could impact both the model's operational effectiveness and overall market efficiency. Origin also notes that the AEMC rightly highlights that the introduction of an alternative form of generator access will be a complex process.[2] Still, a high level of complexity should not be the sole factor in determining the suitability of the OFA to the NEM. The real issue is whether the model's complexity and resultant impacts is proportionate to the problems it seeks to resolve, and if its adoption will result in net benefits of a sufficient magnitude that would warrant its introduction. In our view the detailed analysis needed to fully answer these questions has not yet been undertaken and it is our expectation that the AEMC will do so in due course before pursuing the OFA model further.

The two concerns most often referred to in discussions around access are – dispatch uncertainty (due to network congestion), and disorderly bidding. Whilst theoretically these can be problems under the current open access arrangements, no evidence has been presented to suggest that either the current or likely future incidence of these is at a level that would warrant the wholesale replacement of the current regime. Further to this, an observation of the top 20 binding network constraints (in terms of binding hours) for 2011, compared with 2010 indicates that for the most part the top constraints are not the same over this two year period[3]. This is indicative of the current transmission framework largely delivering timely investment to address material constraints, and, that congestion is mostly transient as opposed to being symptomatic of some systemic problem. Generally, issues around the adequacy of the current framework including an assessment of the incidence and materiality of disorderly bidding, and congestion, should be investigated further and form part of the AEMC's deliberations going forward. To proceed to the adoption of new access arrangements without doing so, could prove to be premature.

It is important to note that no one access regime is perfect and thus substituting one set of arrangements for another is likely to result in tradeoffs that will need to be assessed. Improvements in one area could be cancelled out by deficiencies in another - as highlighted in Section 2.2 of this submission where we examine some of the operational challenges under the OFA.

Additionally, the costs of imposing a new set of access arrangements on a mature market such as the NEM should be taken into consideration. The ERCOT market in Texas is perhaps a useful test case where the move from a zonal to a nodal market was plagued by costs and timing overruns with a final implementation cost of over US$500 million - more than double the initial estimate.

The AEMC seems to acknowledge the need for some deeper analysis as it states that:

[1] AEMC 2012: Transmission Frameworks Review Second Interim Report, Exec Summary, pg ii
[2] *Ibid*
[3] AEMO 2011: The NEM Constraint Report 2011, pg 12

'*careful consideration will need to be given whether the potential benefits outweigh the risks and costs, not all of which will be clearly quantifiable because it is difficult to forecast future patterns of generation investment and, in particular, how generators would respond to access choices'*[4].

Origin is cognisant of the inherent difficulties in quantifying the costs/benefits associated with any set of access arrangements. However this does not preclude the need to thoroughly assess the implications of adopting the OFA. Our concern is that the challenges in carrying out such analysis could result in a decision on the suitability of the OFA being made on purely theoretical grounds. This in our view does not constitute the holistic decision making framework that is required, with the obvious shortcoming being that often concepts that may appear to be theoretically sound can prove to be practically unworkable or operationally complex. We need to look no further than New Zealand where the decision to adopt nodal pricing whilst seemingly prudent from an efficiency of dispatch point of view, has resulted in some unintended consequences. With no means of hedging price differences between nodes, there is currently very little liquidity or depth in the contracts market which has impeded market efficiency. At first glance it would seem that New Zealand policy makers should simply develop firm transmission rights (FTR) to manage the inherent basis risk under nodal pricing. However whilst this has been contemplated and debated for a number of years, the development of a suitable regime has proven to be anything but simple, with still no FTRs in place.

2.2 Potential issues under the OFA model

The following section sets out a number of practical challenges under the OFA model. This highlights the degree of complexity associated with the model and the extent to which the OFA is likely to be effective in achieving its desired outcomes particularly as it relates to improving the certainty and efficiency of dispatch.

2.2.1 The choice to be firm or non-firm

Conceptually all generators under the OFA would be able to make a decision on whether to acquire firm access by weighing up the cost of this service against the risks associated with being non-firm. This, however, may not be straight forward given a lack of clear pricing signals. Firstly, the interconnectedness of more complex centrally located network constraints would mean that generators affected by these would need to understand the impact of network flows and constraints in separate but linked parts of the network (including inter-regionally). We explore these issues in greater detail in section 2.2.4, in the context of the impact on settlement. Origin notes that the AEMC states in its Technical Paper that *'access decisions should not be – and will not be – affected by congestion in other parts of the region*.'[5] However, we consider that this is precisely the case for numerous constraints where congestion in one part of the network can invariably impact dispatch of generation in other parts of the region. This means that decisions around firm access will not be entirely straight forward, and in fact could prove to be quite complex.

Another issue that could make it challenging for generators when deciding whether to acquire firm access is the lack of transparency in the application of constraints. This would prevent generators from discerning the impacts of a particular constraint on their operations which is necessary to make an informed decision around access. At a high level our understanding of how the process would work is that a generator would negotiate a firm access standard with a TNSP. The TNSP would then advise AEMO of the ratings for equipment underpinning the network capacity. In formulating the constraint, AEMO traditionally would take an additional margin on top of the advised ratings limit to ensure the network is maintained in a secure operating state. This means that the generator would have little visibility regarding the application of the constraint prior to making a decision around access. This issue is compounded by the move from fixed seasonal ratings to dynamic real

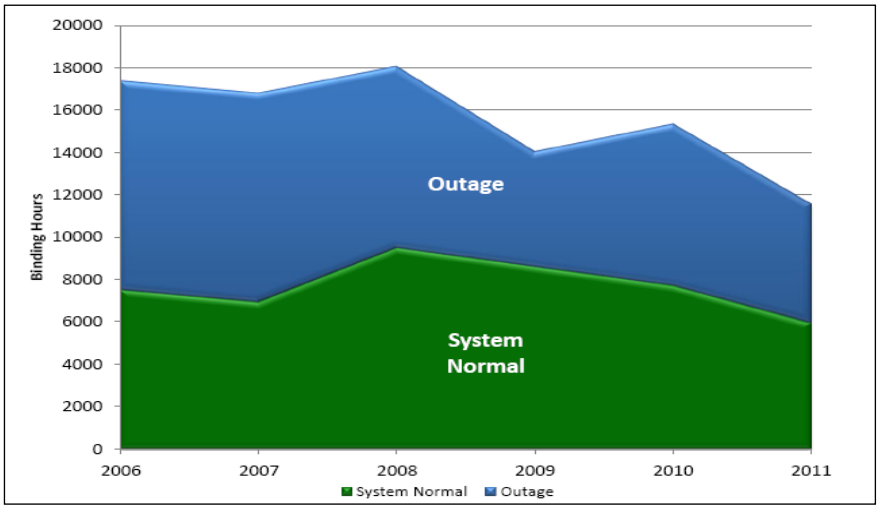
[4] AEMC 2012: Transmission Frameworks Review Second Interim Report, Exec Summary, pg ii
[5] AEMC 2012: Transmission Frameworks Review Second Interim Report - Technical Paper, pg 27

time ratings where equipment ratings are continually rerated to enhance the efficiency and capacity of the network.

2.2.2 Certainty under the OFA

The AEMC points out that one of the benefits of the OFA is that it would provide greater certainty for generators leading to higher levels of contracting and increased liquidity. The extent to which this is likely to occur, however, should be examined given that access would in fact be firm and not fixed. This means that generators would only be guaranteed a particular level of access at times of system normal conditions as '*the firm access standard would progressively scale back the service level that must be provided under more severe transmission conditions.*'[6] As highlighted by the below diagram from AEMO's 2011 NEM Constraint Report, roughly half of all constraint binding hours is due to outages and thus outside of system normal. This calls into question the level of certainty that would actually be provided by the OFA and whether this would be significantly greater than under the status quo. It also highlights that regardless of the access regime an important aspect in enabling greater certainty over dispatch, is to ensure that TNSPS have sufficient incentives for the efficient operation of the network. As such, a key focus of this Review should be to explore the extent to which greater efficiencies can be achieved in this area. A singular focus on the form of the access regime will therefore be limited in its effectiveness.

Figure 1 Binding hours for system normal and outages



The OFA would also lead to greater uncertainty and increased risks for non-firm generators. Under the model, non-firm generators would have to compensate firm generators the difference between the regional reference price and the local price if they are dispatched ahead of firm generators when there is a binding constraint. This means that non-firm generators would be exposed to intra-regional price/basis risk since they would no longer be guaranteed the regional reference price. Currently generators who enter contracts with counterparties in other regions must contend with inter-regional price separation. If the OFA introduces added exposure to intra-regional price separation, (with no means of hedging this risk), it could result in lower levels of contracting as generators seek to mitigate this risk.

It could be argued that to avoid the above situation generators should simply exercise their option to acquire some firmer level of access if they consider the risks of being non-firm to be too high.

[6] AEMC 2012:Transmission Frameworks Review Second Interim Report, pg 26

However as we have highlighted in the previous section, decisions around whether to obtain firm access will be complex for some generators as they may not have a clear idea of the tradeoffs involved.

2.2.3 Difficulties in optimising network build

Currently transmission network service provides (TNSPs) are responsible for ensuring that reliability is met under state based reliability standards. The OFA would introduce a new standard where TNSPs would also have an obligation to augment the network (as required) to ensure the meeting of the agreed level of access under the FAS. Origin is concerned that the interaction of these two standards could introduce an added level of complexity as TNSPs expand the network, resulting in adverse implications for the efficiency of network build.

To a large extent the performance of the NEM is gauged by the ability to meet load requirements in a timely manner at least cost. From this perspective the transmission planning and investment framework must ensure that there is sufficient network capacity for this to occur. Generators then choose to enter the market in response to some current/future expectation around demand. It therefore means that the core objective of network expansion plans is the meeting of demand at least cost, i.e. to ultimately satisfy the reliability standard. Our concern is that if the FAS calls for network build above what is required for the reliability standard it could result in the overinvestment in transmission capacity. The AEMC points out that one of the advantages of the OFA model is that transmission investment would be partially driven by generators choosing to pay for firm access rather than planners anticipating generator market development, and customers paying for all transmission.[7] However, generators that choose to pay for firm access would most likely need to recover this cost as reflected in their bids in the spot market and contract prices, which means that ultimately customers could end up paying anyway.

Another issue that would need to be resolved is how network augmentations under the OFA would be carried out. Due to the lumpy nature of network assets, transmission build is most efficiently undertaken in large blocks to allow for the realisation of scale economies which materially improve the economics of these projects. A firm access model seems to call for a greater degree of incremental (less efficient) build in response to specific generator access requests. It is therefore unclear how TNSPs would co-optimise the build needed to meet the FAS with that required under the reliability standard to ensure that a least cost approach to network augmentations is maintained.

If more incremental network expansion is to be avoided, generators could end up waiting for some time before the necessary augmentations to meet the FAS could be included under some broader expansion plan. This could lead to queuing issues which undermines the greater level of certainty that is theoretically a strength of the OFA. Additionally, the allocation of costs between the negotiated (access driven) portion of the augmentation and the prescribed (reliability driven) portion is likely to be technically and administratively complexity. Origin notes that the calculation of the long run incremental cost (LRIC) to be paid by firm generators is intended to facilitate this process, but is of the view that this will not be straight forward and could result in dispute. The issue of cost allocation is already subject to some level of disquiet under the current connections framework which could increase with the introduction of the OFA.

2.2.4 Complexity of Settlement

The AEMC states in the Interim Report that whilst conceptually complex, settlement should be straight forward to implement and would be based on a generators participation factor as measured

[7] AEMC 2012: Transmission Frameworks Review, Second Interim Report

by the proportion of its output that passes through the flowgate[8]. The AEMC notes that '*participation factors are currently calculated by AEMO for every generator for every congested flow gate and appear as coefficients in the corresponding NEMDE constraint equation'*[9].

Origin agrees that settlement could be straight forward in the case of simple constraints at the edge of the network. For example, generators in the La Trobe Valley are at one end of the network with a direct generation flow path to Thomastown - the Regional Reference Node (RRN) in Victoria. However settlement could be more complex in relation to nodes located centrally within the network where changes to generation flow paths invariably impact other flow paths in separate but linked parts of the network. For example the Mt Piper/Wallerawang constraint in central NSW and Calvale/Stanwell constraint in northern Queensland are both examples of more complex constraints. When both constraints have become binding, it has resulted in the constraining down of generation at Bayswater to the north and at Lower & Upper Tumut and Uranquinty to the south. The Calvale/Stanwell constraint impacts and constrains down nearly all generation to the south of Gladstone, including around Dalby.

It therefore means that whilst payments to the firm generator are likely to be reasonably clear for both simple and complex constraints, it could be more challenging to apportion the corresponding costs to non-firm generators on an equitable basis. That is, given the interrelated nature of some constraints it is not entirely clear how AEMO would pro rata the costs back to non-firm generators measured as their MW contribution to any one constraint multiplied by the difference between the regional reference price and the local price.

The conventional view of a constraint is a unit's participation factor is transparent but the calculation and value of the RHS of the constraint equation is variable. On this basis pro-rating cost allocation to non-firm generation for the volume of generating constrained is also not transparent and inherently complex. These variables are also calculated on a 5 minute basis and settled on a 30 minute basis compounding the complexity. In addition, as the OFA report notes, 'it is not possible to *physically* track generator output through a shared network,'[10]meaning that the settlement and pro-rata of cost allocation to non-firm generators being based on an abstract estimation rather than on a physical value.

2.2.5 Potential for gaming

In assessing the merits of implementing the OFA, the AEMC should also consider the potential for gaming and perverse incentives. We discuss two such possibilities below:

- Dispatch and availability
  To solve the perceived problem of dispatch risk and disorderly bidding in the NEM the OFA seeks to de-link dispatch from access and link access and availability. Origin considers there is an inherent disconnect between a generating units access as and its availability as dispatch. A unit's dispatch is its actual output while the unit's availability is what is bid into the market. By linking dispatch with availability the OFA could potentially incentivise perverse behaviour among 'firm' generators given the availability of a unit can be directly influenced by rebidding.

  Under the OFA generators would have the option of procuring super-firm access which would represent over 100 percent of its availability. In this way access becomes equal to availability and compensation would be paid to a firm generator based on the gap between the units

[8] AEMC 2012: Transmission Frameworks Review Second Interim Report, pg 29
[9] AEMC 2012: Transmission Frameworks Review Second Interim - Technical Report, pg 19
[10] *Ibid*

dispatch and predetermined access standard. It therefore means that a firm generator could deliberately overstate its level of availability knowing that the level of dispatch based on ambient and other operating plant conditions means no effective electrical energy is being generated. This would effectively result in a wealth transfer from the non-firm generator (that is actually providing generation to the market) to the firm generator, with no overall improvement in market efficiency.

- Inflating the Local Marginal Price
  Non-firm generators would have an incentive under the OFA to increase its bid price in an attempt to inflate the local price and hence minimise compensation to firm generators, which would be calculated as the difference between the regional reference price and the local price. Bid offers are published so it would be relatively easy to shadow bid other generators on the constraint. The AEMC acknowledges this possibility, but has concluded that this behaviour would only result in a wealth transfer firm and non-firm generators and would not impact the market overall. However, in our view this could result in higher spot prices, if this behaviour puts upward pressure on the regional reference price.

2.3 Comparison of the OFA and Open access

The below table compares the OFA model with the current open access regime against three key criteria:

- **Certainty** each model will give to generators in terms of dispatch outcomes;
- **Efficiency of dispatch** as it relates to the potential for gaming and non-cost reflective bids; and
- **Operational issues** which highlights the complexity under each model, which will have direct implications for costs and overall market efficiency

Access model	Certainty	Efficiency of Dispatch	Operational Issues
Open Access	Generators run the risk of being constrained off, when there are binding constraints. Though the risk of this can be mitigated by a sound transmission planning and investment framework. Additionally there has not been compelling evidence to suggest that congestion has resulted in significant market inefficiency.	Potential for disorderly bidding when constraints bind, though the materiality and overall costs of this has not been proven to be significant	Operationally simple with all generators having equal rights to access the network.
OFA	Generators that acquire firm access will have greater certainty over dispatch when system normal conditions exist. However given that around half of all constraints are as a result of outages, access would be scaled down at these periods. The OFA is likely to increase uncertainty for non-firm generators given that exposure to their local price will increase basis risk, with no means of hedging. This	OFA likely to reduce incentives for disorderly bidding as we know it today as non firm generators would run the risk of being settled at their local price if they bid below cost However model could introduce other inefficiencies. There is an incentive for non-firm generators to increase their bids to minimise compensation	TNSPs would need to optimise network build in meeting both the reliability standard and the FAS. There is an increased potential for over investment in networks if the FAS calls for greater network build than the reliability standard. The allocation of costs to firm generators for augmentations to the shared network likely to prove complex, with the calculation of the LRIC, far from straightforward. There is potential for disputes between generators and TNSPs over the calculation of the LRIC. Decision making framework for generators around whether or not to be firm introduces an added level of complexity.

	could result in lower levels of contracting.	to firm generators. This could result in higher pool prices.	The apportioning of costs to non-firm generators at settlement could be challenging given the interrelated nature of more complex constraints.

Our key take way from the above comparison between the OFA and open access is that whilst the OFA could improve the certainty of dispatch for firm generators at times of system normal constraints it will introduce a greater level of uncertainty for non-firm generators. Similarly, while the OFA would likely discourage disorderly bidding as we know it today, it could provide incentives for other behaviour which could result in inefficiencies. Importantly, also the operational complexity of the model does not bode well when compared to the relative simplicity of the current regime.

3. Connections

This review process has confirmed that the deficiencies in the connections framework are largely as a result of the lack of clarity in the Rules around how connections are regulated, and the inherent disadvantage of connecting parties when negotiating to connect to the network. With this in mind Origin considers that the AEMC has correctly identified the issues that would need to be addressed to improve the efficiency of the framework. Our specific comments on the various areas of focus in the Interim Report are outlined below.

3.1 *Clarification of the Rules*

Origin is broadly supportive of the AEMC's proposal to simplify the Rules so that the only distinction between connection assets and transmission network assets is in who pays for these assets. We also 'in principle' support the intent of the principles outlined in the Interim Report that would be used to guide the re-drafting of the relevant sections of the Rules. We note, however, that we will not be in a position to fully assess the likely impact of these until draft rules are formulated for review.

3.2 Enhance transparency of the connections process

Origin supports the proposed measures to enhance the transparency of the connections framework through the requirement for TNSPs to publish a standard connection contract, and make available detailed cost information to connection applicants.

The provision of a standard contract is useful in that it could serve as a default option and provide a safety net for connection applicants. Additionally, it would provide a reasonable starting point for connection negotiations. This could save time compared to the current arrangements where often the views of connecting parties and TNSPs on the key terms and conditions of a contract, are diametrically opposed. It should be noted that we are not advocating that standardisation should take the place of commercial negotiations as we still consider this to be the best means of achieving the most efficient outcomes. We envision that connection applications would seek to vary the components of the standard contract through negotiations, in line with the proponent's specific needs. If appropriately designed the establishment of a default mechanism would lay the foundation for more equitable negotiations and ultimately better market outcomes.

The proposal for TNSPs to publish the design standards and philosophies for connection assets used in connecting Distribution Network Service Providers (DNSPs) load is a good one, as this would provide a useful guide for generators looking to connect to the transmission network.

Uncertainty around cost is one the main issues for prospective generators. Increased transparency in this area will give connecting applicants greater confidence that the costs incurred throughout the connection process are truly reflective of the services provided. Given this, we are supportive of the

development of guidelines that would outline what cost information TNSPs would need to provide to give connecting proponents greater clarity around the costing framework.

3.3 Connection applications to have a greater role in tendering

Origin agrees with the AEMC proposal for the connection applicant to have the option of greater involvement in the tendering process. Specifically, we are supportive of TNSPs making tender responses available, and demonstrating that they have taken into consideration the connection applicant's preferences and priorities.

3.4 Treatment of extensions

The current treatment of extensions has created some confusion for connecting applicants. Origin is therefore in favour of the AEMC's intent to resolve uncertainty in this area, though we do not agree with all of the AEMC's proposals relating to this issue.

Specifically, we are supportive of connection applicants having available to them options for the provision of extensions. These include procuring the design and construction of the extension where there is adequate competition to do so, or requesting the TNSP to provide an end-to-end service which would include the provision of an extension. We therefore agree that where a TNSP is requested to provide an extension by a connecting applicant, they should be obliged to do so.

Origin notes that the AEMC proposes that TNSPs do not have to share tenders for construction of an extension as the connection applicant would have the option of running a competitive tender. Origin considers there could be an option where a TNSP can offer, and the applicant requests, that the TNSP undertake a competitive process for the extension rather than the applicant. In this situation, the TNSP could provide the same information to the connection applicant as for connections through a commercial negotiation on reasonable terms and conditions.

3.4.1 Requirement for registration as a NSP and third party access

Origin notes that there is a divergence of views between the AEMC and some stakeholders as to whether an extension could be 'declared' under the Competition and Consumer Act (CCA) as a facility of national significance for third party access. Origin considers amendments to the NER codifying third party access arrangements would be the most appropriate means of dealing with this issue and would likely preclude any need for declaration under Part IIIA of the CCA.

An area where our views differ from the AEMC is the proposal that connection applicants who design and construct an extension greater than 2 km would be required to register with AEMO as a Network Service Provider or apply to the AER for an exemption. Where a connection proponent has built, owned and operated a private transmission line (of any length) to connect to the transmission network, they should not be required to separately register this asset while the purpose of that asset remains solely for that connection. Such a requirement would only serve to increase red tape and the administrative burden for the connection applicant. Origin is of the view that the distinction should be retained between the operators of shared transmission assets, who are required to register as TNSPs, and owners of connection transmission assets, who are not.

If a third party subsequently seeks access to this line, the original owner should be required to negotiate and offer access on fair and reasonable terms. If this negotiation results in a third party effecting a connection to the private line, this would trigger a change in the status of that line to the point of common coupling. This would necessitate the original connection proponent to either:

- Transfer the original line at least to the point of common coupling to the incumbent TNSP at a fair value. The transferred asset would then become part of the TNSP's prescribed assets; or
- Obtain registration as a TNSP in respect of the original line, at least to the point of common coupling; or
- Seek an exemption from registration as a TNSP, subject to conditions as appropriate.

Origin notes that if the connection proponent was a generator, cross-ownership restrictions would prevent ownership of transmission assets by generators and then only the first of these options may be possible. If the original connection proponent was a customer, then all three of the above options may be open.

The issue of retrospective application of third party access rights should also be dealt with under this review. This would include whether and from what date any extensions would be grandfathered or if any changes to the Rules would only apply to new extensions. If third party access rights are to be applied retrospectively, a 'no disadvantage' test should be applied to the initial connection proponents, to ensure that they are not made worse off.

Where an extension is sold to a TNSP to facilitate a third party, the initial connection party should not be disadvantaged. Where network augmentation is required to limit congestion on the transmission line, the TNSP could be required to undertake a RIT-T to establish and construct the chosen credible option available prior to the transfer of the asset from the connection proponent to the TNSP.

4. Planning

Origin is supportive of efforts aimed at improving inter-regional synergies through an enhancement of the national transmission planning function. Specifically these include:

- An increased role for the National Transmission Planner (NTP) in reviewing jurisdictional Annual Planning Reports to identify complementarities and inter-regional investment options;
- An expert advisory role for the NTP to inform both the RIT-T and AER Revenue Reset process; and
- The transfer of the Last Resort Planning Power from the AEMC to the NTP

Additionally, Origin considers that as far practicable in seeking to refine the planning arrangements, the AEMC should aim for a consistent approach across the NEM. This would provide market participants with greater clarity and increase overall service delivery. We continue to be of the view that financial incentives for transmission companies are the best means of achieving efficiencies in planning.

Regarding the development of a NEM wide transmission pricing scheme, Origin is of the view that conceptually there could be merit in developing such a scheme as it could allow for more equitable inter-regional cost allocation.