



3 February 2015

Mr John Pierce
Australian Energy Market Commission
PO Box A24490
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

Optional Firm Access Design and Testing (EPR0039) - Additional Comments

Origin Energy (Origin) welcomes the opportunity to provide some additional comments to the Australian Energy Market Commission (AEMC), regarding our decision to not support the implementation of the optional firm access (OFA) model. Origin has arrived at this position after careful consideration of both the issues the OFA is intended to resolve and its preliminary design as set out in the Transmission Frameworks Review. Our concerns around the OFA have been further reinforced by the current design and testing work program which has unearthed seemingly perpetual layers of complexity without a projected proportionate increase in market efficiency.

Whilst it is clear that the AEMC has devoted a considerable amount of time and resources in developing the model, it is still not evident that there has been an equal focus in testing its purported benefits and assessing any potentially distortionary market impacts. For this reason, the release of the AEMC's cost benefit analysis is highly anticipated. Notwithstanding the challenges associated with any assessment it is important that justification for the OFA is not merely based on theoretical grounds but rather that the practicality and workability of the model is considered. Additionally, any consideration of the costs to the market of adopting the model must go beyond merely estimating the implementation or operational impost and also include an assessment of any potential negative implications for market efficiency.

Our specific comments on some of the pertinent issues relating to the design, assessment and potential implementation of the OFA are set out overleaf.

The materiality of congestion

There is a misalignment between the scale of the proposed change and the problem it is intended to solve. Previous reviews have concluded that congestion is not a problem of sufficient materiality to warrant significant change to the market. In the new market paradigm of falling demand and the increasing uptake of decentralized energy such as rooftop solar PV, the most likely future scenario is one where there is excess rather than scarce network capacity. AEMO's current forecast is that no new generation capacity is required in any NEM region to maintain supply-adequacy over the next ten years.¹ Transgrid's recent revenue proposal to the Australian Energy Regulator illustrates the likely impact of the change in consumption patterns on future transmission build. TransGrid has sought only \$79m (nominal \$) in augmentation capex over the four year regulatory period, accounting for only 2% of its revised proposed maximum revenue allowance. Clearly there can never be absolute certainty regarding future market outcomes but these indicators should not be ignored. The likelihood of future systemic congestion is not sufficient to warrant a change such as the introduction of the OFA, particularly given any inadequacy of the current arrangements has not been proven to the extent that they would need to be abandoned.

¹ Electricity Statement of Opportunities, Executive Summary pg 1, August 2014, AEMO

Origin notes that transmission related issues have been subject to numerous reviews over the life of the National Electricity Market (NEM), with vigorous debate as to whether significant reforms are needed. However, perhaps even the most ardent supporters of changes to the status quo would not have envisioned such a fundamental change as is now proposed. In our view, the fact that there have not been any significant changes in this area is indicative of the current arrangements working reasonably well, and not a failure of the regulatory process. Any contemplated reforms to the congestion management regime and transmission framework should therefore be done on an incremental and measured basis.

Financial certainty for generators

Energy only markets such as the NEM have an innate level of risk given the potential for large fluctuations in prices. The incidence of congestion can exacerbate this risk and undermine financial certainty for generators. In assessing the effectiveness of the OFA as a risk management tool, however, the AEMC should consider current avenues for generator risk management and whether there are material deficiencies. In Origin's view the management of congestion related risk in the market has proven to be effective. This is not to say that the market should not strive for improvement, but rather the scale of the proposed OFA reforms is indicative of a congestion risk management regime that is fundamentally broken. This is not the case. We note that the AEMC has commissioned work to ascertain the perspective of generator participants on this issue. It is hoped that these findings are presented, so as to shed light on generators' views on the need for a mechanism such as OFA to increase financial certainty.

The need for the OFA aside, Origin is concerned that the mechanism has the potential to decrease rather than increase certainty for generators. Decisions around whether to purchase access will be highly dependent on whether or not a generator thinks that other generators along a relevant flow path are likely to acquire access. The interdependence of decision making is an inherent feature of markets such as the NEM, and represents a risk to the extent that there are consequences of incorrectly anticipating the actions of competitors. In the case of OFA if a generator does not procure firm access it runs the risk of being separated from the regional reference price, and thus being exposed to its local shadow price. This would introduce a new risk in the market in the form of intra-regional basis risk. Origin notes that the AEMC has previously contended that to mitigate such a risk a generator could simply choose to procure a firm level of access, however, such decisions are unlikely to be straightforward where a generator will need to manage multiple flow paths in a meshed network, and is an added market complication.

Dispatch efficiency

Previous studies have shown that the impact of so called disorderly bidding in the NEM is minimal. This aside, Origin's concern is that whilst OFA will reduce the incentive for generators behind a constraint to bid below cost, the model would be ineffective in dealing with a number of other instances of dispatch inefficiency (as highlighted by AEMO's work on access settlement). Given the complex and resource intensive nature of the OFA, (and that it is being presented as a comprehensive transmission reform package), the fact that it will be ineffective in dealing with the inefficient dispatch outcomes as identified by AEMO, calls into question the value of pursuing the model.

We would also urge the AEMC to examine the potential for the emergence of other forms of disorderly bidding under OFA. For example a higher cost firm generator could have an incentive to cause a particular constraint to bind so as to reap the benefits of the firm access pay out. It is unlikely that any set of access arrangements would be immune to sub-optimal dispatch outcomes. It is important that the shortcomings of the OFA in this respect are made clear.

Locational signals

Origin continues to maintain that locational signals in the NEM are sufficient. One of the purported benefits of the OFA is that it would provide improved signals for the more efficient location of generation. In our experience generators are likely to consider a number of factors when choosing to

locate, with access to fuel a primary determinant. Much has been made of the increasing entry of wind generators and their impact on the transmission network. The fact is, however, that wind farms will continue to choose to locate in areas with the best wind resources. A mechanism such as OFA could at best only be successful in influencing the locational decisions of some marginal projects or allocating some cost to new generators that contribute to congestion. On balance we therefore do not see the introduction of the OFA as being a panacea in terms of its ability to effect more efficient locational decisions in the NEM.

Co-optimisation of transmission and generation investment

Conceptually greater co-optimisation of transmission and generation is a desirable outcome. We, however, again question the extent to which this is achievable given that the majority of transmission build, has, and will continue to be driven by the need to meet the reliability standard. Much of the argument in support of greater co-optimisation seems to focus on shifting the costs of transmission from consumers to generators. Simple wealth transfers, however, are not welfare enhancing, and we would argue ensuring that there is the optimal level of transmission build is the paramount issue.

We also envision that there could be challenges in aligning the firm access standard with the reliability standard, with the potential for a greater level of transmission augmentation compared to the status quo. Origin does not take comfort in the simplistic argument that this would be a sound market outcome given that generators would be funding any increase in transmission works. The fact is that an increase in generator fixed costs would need to be recovered at some point throughout the life of the asset, which would mean that any increase in network spend would ultimately impact the retail market. The AEMC should consider the efficiency and market impact of generators passing on these additional fixed costs, particularly in an oversupplied market.

TNSP Incentives

Another purported benefit of the OFA is that it would enhance incentives for TNSPs to manage the network more efficiently. Origin's view is that the current incentive arrangements have worked well. However, if there is a desire to improve the incentive framework, we question why this cannot be done independently of a complicated mechanism such as OFA. Additionally we also question the ability of OFA to provide any greater incentives for TNSPs to minimize outages beyond the current incentive regime. Given that a vast portion of congestion related incidences are as a result of outages, the ability to guarantee access outside of system normal conditions will be crucial if the OFA is to be effective. We would recommend that the AEMC undertake some work to shed some light on this issue.

Long run incremental cost (LRIC)

Origin remains concerned about the application of the LRIC and its capability to deliver an accurate and efficient cost for access. By applying a stylised model that locks in the net present cost of future transmission investments well in advance and without an assessment of credible alternatives, the LRIC is likely to result in less efficient pricing outcomes, particularly when compared to the status quo.

Should you have any questions or wish to discuss this submission further, please contact Steve Reid on (02) 9503 511 or steve.reid@originenergy.com.au.



Yours sincerely,
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