26 April 2019

John Pierce
Chairman
Australian Energy Market Commission

Dear Mr Pierce

AEMC COORDINATION OF GENERATION AND TRANSMISSION INVESTMENT CONSULTATION PAPER

Origin Energy Limited (Origin) welcomes the opportunity to provide feedback on the Australian Energy Market Commission's (AEMC) Coordination of Generation and Transmission Investment (COGATI) Consultation Papers.

Origin does not consider that the case for implementing the dynamic regional pricing model has been made. While the Consultation Paper indicates the AEMC is open to contemplating other options, we note that the soon to be convened Technical Working Group will primarily focus on refining the proposed model.[1]

Our suggestion is that the AEMC adopt a first principles approach. Where there are concerns regarding the adequacy of locational signals in the market, the nature and extent of these should be evaluated to allow for consideration of a more comprehensive and better targeted suite of options. Such an approach would have implications for the consultation timetable, which currently is quite ambitious. The plan to have draft rules ready by the end of the year pre-supposes acceptance of the current model and runs the risk of undermining meaningful consultation on alternatives.

The rationale for dynamic regional pricing seems to be premised on several transmission related issues outlined in the Supplementary Consultation Paper. However, a closer look at these calls into question the significance of the issues and the appropriateness of the proposed model as the solution. As outlined in Table 1, dynamic regional pricing and a move to firm access is not a universal fix that can be applied to every transmission issue in the National Electricity Market (NEM).

Table 1 – Transmission related issues presented in Consultation paper

Transmission related issue	Comment
Disorderly bidding	All the evidence suggests that this is not a significant issue, and the concern that entry of storage technology will increase the incidence of disorderly bidding is unfounded.
Network outages	There is nothing to suggest that the scheduling of outages is a significant problem; and if there are issues, this should be addressed through TNSP incentive schemes
Marginal loss factors	While the fluctuation in loss factors is emerging as a significant issue, this should be addressed through a dedicated work program.
Renewable Energy Zones (REZ)	The absence of a firm access regime has not been the limiting factor in the connection of remote renewable generation. Instead, varying project timelines, the lumpy

[1] AEMC, 2019, *Supplementary Information Paper: COGATI Implementation – Access and Charging*, p3.

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	nature of transmission investment and potential need for oversized assets and the consequent risk of stranding have been the main challenges.
Confidentiality Requirements	Generator confidentiality requirements are currently being examined by the AEMC through a rule change request. These concerns are not related to access arrangements.
Network connections	Generators have been experiencing delays in the connection process due to resource shortages which has been exacerbated by the high volume of new connections. While there could potentially be need for a more streamlined the process, the access arrangements are not a factor.

If you have any questions or wish to discuss this submission further, please contact Alex Fattal via email alex.fattal@originenergy.com.au or phone, on (02) 9375 5640.

Yours sincerely

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Attachment 1: Detailed feedback on the consultation paper

The case for implementing dynamic regional pricing has not been made.

The AEMC has identified several transmission related challenges facing the NEM, with a view that these matters can be resolved through the introduction of the dynamic pricing model and a subsequent move to firm access. However, as discussed in more detail below, some of the identified issues are not material, while others are being dealt with in other regulatory processes. It is important to acknowledge that access reform is not a universal fix that can be applied to all transmission issues in the market.

Disorderly bidding is not a material issue

As noted in the AEMC's disorderly bidding factsheet, the historical assessment has been that disorderly bidding is not a material issue in the market.[2] We also note that recent changes to the rebidding rules[3] and the introduction of five-minute settlement will all serve to further reduce incentives for disorderly bidding.

There is no evidence that the NEM's changing technology mix is leading to increased disorderly bidding. The AEMC refers to the increased penetration of storage potentially creating greater incentives for disorderly bidding, however the basis of this concern is not clear. The NEM has always had generators with varying short-run marginal cost, and yet disorderly has not been a major issue. Additionally, the economics of batteries is as such that they are likely to be charging at times of low pool prices as opposed to be bidding in a disorderly manner to ensure dispatch.

If there is a specific concern regarding the potential market activities of storage, then it is better to examine this through a dedicated project. The Australian Energy Market Operator (AEMO) is preparing a rule change on the registration requirements for storage.

Planned outages choices are not linked to generator access

The Supplementary Consultation Paper refers to generators temporarily experiencing constraints due to Transmission Network Service Providers (TNSPs) organising planned outages for maintenance. The AEMC proposes that TNSPs would be likely "to provide a level of access consistent with the firm transmission rights collectively held by generators" when scheduling outages. However, it is not clear that the scheduling of outages is a significant problem in the market. TNSPs already need to ensure their outages do not cause reliability issues, which means that they would avoid outages when the supply/ demand balance is likely to be tight.

Even if the scheduling of outages is found to be a material problem, the focus should be on enhancing the Service Target and Performance Incentive Scheme (STPIS).

[2] AEMC, 2019*, Fact Sheet - Disorderly Bidding, p2*
[3] AEMC 2015, *Bidding in Good Faith Final Determination*

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Loss factors should be examined in detail elsewhere

We agree that the annual fluctuations in loss factors is proving difficult for market participants to manage. However, this is most appropriately dealt with through a dedicated work program that will explore all potential options.

The AEMC has received two rule change requests on Marginal Loss Factors (MLF) from Adani Renewables, and AEMO is in the process of preparing an additional rule change request on this topic. These rule changes will be an appropriate way of examining how the loss factor calculations could provide clear and transparent signals to generators, while minimising unwarranted risk of fluctuation.

In its current form the dynamic regional pricing model does not change the processes around setting and reviewing generators' MLFs. It is unclear how changes to access will help generators manage the issues (that the consultation paper has identified) with the current MLF regime.

Renewable Energy Zones will not be funded through access payments

We do not agree that the absence of a firm access regime has been the limiting factor in the development of remote renewable generation. A transmission line built to connect a Renewable Energy Zone (REZ) would be categorised as a connection asset and therefore not subject to the open access arrangements. The coordination of several projects at different stages of development; the lumpy nature of transmission build, and the potential need for the oversizing of assets (and consequent risk of stranding) have been some of the major challenges facing the connection of REZs.

The consultation paper states that a REZ could be developed by connecting new entrant generators paying for access, allowing for construction of network assets for connection. However, if access is only purchased once a prospective generator chooses a location and arranges finance, then the network's construction is likely to lag the construction of generators. It is unlikely that generators would buy access and connect to a REZ unless the REZ is already largely complete. In turn, access payments will not be a way of funding the initial development of a REZ nor determining its location.

Confidentiality issues should be resolved through current rule changes

The proposed model does not change the information flow between a new entrant and wider market, even if the generator buys access. TNSPs are currently aware of the generators that have made connection requests. The current issue is that generators and TNSPs are not clear on what information they are able to share.

The Consultation Paper raises the difficulty of multiple new entrants sharing information on the cost of security related upgrades where this may be the cheapest solution for the generators to comply with the do no harm provisions. We consider that concern is mainly related to confidentiality between generators, and the difficulty of competitive actors cooperating. Improving information flow relating to new entrants will lead to the potential for generators to better consider each other's plans when connecting.

We note that the AEMC is currently assessing rule change requests from the Australian Energy Council (AEC), Energy Networks Australia (ENA), and AEMO that should assist in addressing the above issues.

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Network connections

It is not clear how a lack of firm access is related to delays in generators connecting to the network. The primary driver of delays is the high number of generators looking to connect, leading to heavy workload for TNSPs and AEMO. It may be possible to streamline the current connection process, but this is unrelated to the arrangement for access.

A review of locational signals may be warranted given the current market transformation

Locational signals in the market have historically worked well. However, as the types of generators entering the market changes, so does the pattern of new entry. If the view now is that current locational signals need strengthening, we do not agree that the proposed option is the best approach. We suggest that the AEMC explore a more comprehensive suite of options. This work could be guided by some key principles:

- **Predictability and simplicity -** Outcomes should be clear for participants, with a transparent method of evaluating impacts of any decisions.
- **Causer Pays -** Costs should be borne by whichever participant has caused them. Participants that are not able to influence outcomes should not face additional costs. Notably, existing generators cannot change their location and so should not be subject to the costs associated with any new locational signals.
- **Dynamic efficiency –** Any model should promote efficient investment and least cost outcomes. There should be no distortion of other market signals.

In our view the proposed model is not aligned with the above principles, particularly when compared to an alternative such as deep connection charging where new entrants would be responsible for their impact on the network. A TNSP or AEMO could determine if a new entrant will cause an increase in congestion (above an efficient level) as part of its connection costs. If so, the new entrant would be responsible for any augmentation to maintain the status-quo. This would be similar to the existing "do no harm" arrangements for system strength.

We are not advocating for deep connection charges at this point but have included a brief comparison of the two approaches in Table 2, primarily as a means of examining the trade-offs involved under various options.

Table 2 – Comparing Dynamic Regional Pricing with deep connection charges

	Dynamic Regional Pricing model	**Deep connection charges**
Predictability and simplicity	Dynamic pricing requires complex changes to network planning, and generator bidding arrangements. The AEMC has not laid out the methodology used to calculate access costs, however we assume it will require bespoke costing at each connection point, to include a clear price signal.	Generators make a connection request and is informed of the costs of any required augmentation at a specific location. Once connected, no further ongoing costs. No other changes to regulatory arrangements will be necessary.

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Causer Pays	All generators must pay for access or risk being exposed to the dynamic price, regardless of impact. Existing generators are included, even though they can't change location. Network dynamics may change at any point, altering the access charges faced by a generator that has been at a location for some time.	There is a direct link between the impact a new entrant would have on the network, and how much that generator must pay for its connection.
Dynamic efficiency	Existing generators are impacted by any reform, as well as new entrants. Low cost generators without access may be required to pay compensation to high priced firm generators. This dampens price signals in the market that are not linked to the access model.	A clear signal is made to new entrants. These generators can choose to locate at any connection point with full information on total cost impact. Generator locational decisions would be based on balancing deep connection costs with other factors, such as proximity to fuel.

Proposed timeline does not allow proper evaluation of the issues in the market

We are concerned that the timeline and process laid out by the AEMC does not give enough time to fully evaluate the issues or consider alternatives. We note that the supplementary information paper sets out the task of the technical working group as examining issues on high level design for access reform. We consider this work is premature. Only after the AEMC has worked with stakeholders to identify the key issues and chosen an option from a suite of reforms should implementation plans be developed.

Transmission charging reforms should not be linked with access changes

There is no reason that the implementation timeline of Inter-Regional Transmission Use of Service (IR-TUOS) needs to align with the assessment of dynamic regional pricing, unless it is assumed that that the solution will encompass both issues. The AEMC should investigate the IR-TUOS arrangement that best meets the needs of consumers and networks independent of any contemplation of access reform.

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