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Mr John Pierce

Chairman

Australian Energy Market Commission

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Dear Mr Pierce,

AEMC Optional Firm Access, Design and Testing – Supplementary Report: Pricing

AGL thanks the Australian Energy Market Commission (**AEMC**) for the opportunity to comment on the *Optional Firm Access, Design and Testing – Supplementary Report: Pricing* (the **Pricing Report**) which outlines a preliminary pricing model to support the proposed Optional Firm Access (**OFA**) regime.

We have previously expressed our serious reservations about the proposed OFA regime. These reservations lie not only with whether such a material and complicated adjustment to the National Electricity Market (**NEM**) is needed or appropriate under current conditions, but also with the fact that it is not yet apparent that the proposed regime will lead to a better outcome from a network planning and market efficiency perspective than is delivered under existing market and regulatory frameworks.

We appreciate the AEMC seeking external feedback on the prototype pricing model, which it admits is at a relatively rudimentary stage of development. We have not directly accessed the prototype model, but from a review of the supporting explanatory materials our concerns are as follows:

1. **Inappropriately high-level of abstraction**

   We do not consider that 'assuming away' the complexity in accurately forecasting the incremental cost that a particular generator's access has on the network is appropriate. The justification seems to be that it will 'all come out in the wash'. However, conditions in the market are currently highly competitive and imposing a new fixed cost on generators that will in some cases be too high and in some cases too low would constitute an indiscriminate allotment of new competitive advantage. Further, to suggest that '*access prices do not need to be perfectly accurate in order to provide an efficient price signal*' fails to recognise that the access price (in combination with other factors such as fuel availability) may be the difference between pursuing a generation investment or otherwise, and inaccuracy could therefore lead to inefficient investment.

   Whilst we have ourselves expressed concern about the complexity of the OFA design overall, given that the framework is predicated on a pricing signal encouraging efficient investment in the transmission network, then the accuracy of that pricing signal should be a primary concern. Accordingly the model should strive as far as possible for an accurate assessment of incremental access costs.

2. Network augmentation costs

Rather than simply approximating augmentation costs on a per MW per km basis for lines and a cost per MW for transformers, the model should consider the most economically efficient means of meeting the firm access standard which might involve more innovative solutions than simply laying additional lines and transformers. The Pricing Report itself highlights that more incremental actions are not yet priced in the model (such as the installation of capacitor banks). Nor does the model price non-network options, such as operational actions and entering network support agreements, which are all slated as potential means for a Transmission Network Service Provider (**TNSP**) meeting the firm access standard.

We understand that the TNSP will continue (under the RIT-T framework) to consider a range of possible solutions to optimise network investment. If the pricing model cannot also reflect an optimised network development scenario then access pricing will diverge substantially from (and overshoot) actual network development costs and result in overpaying by firm access generators.

Further, it is not clear who will provide the input costs for the high level elements (lines and transformers) which *are* taken into account in the model, whether they will be made transparent, whether they would or should be market tested and whether they would be periodically updated. Costs of lines and transformers will also be influenced by topography and scale considerations and this should be reflected in the model.

3. Accounting for local load in incremental cost assessment

Access pricing that *prima facie* penalises access seekers wanting to connect at a distance from the Regional Reference Node (**RRN**) will in many cases not reflect underlying network realities. Load may in fact also be positioned at a distance from the RRN due to raw materials, transport or labour considerations, and it may be quite efficient from a transmission network perspective for a generator to connect close to that load rather than the RRN (even reducing constraints at the RRN). The pricing model must be able to model realistic and representative network flows otherwise it will fail to produce access pricing that is truly reflective of the incremental costs related to a generator's firm access.

4. No accounting for non-thermal constraints

The Pricing Report acknowledges that the pricing model must be modified to be able to take account of non-thermal (e.g. stability) constraints on the network if it is to determine realistic incremental access costs and prices. We strongly agree with this.

5. Forecasting error remains a real issue

One risk that the OFA supposedly attempts to address is of a TNSP, when planning transmission investments under the RIT-T framework, making an incorrect assessment of the direction and extent of future growth in demand and generation on the network so that generation development and transmission planning are not co-optimised. However, it is not clear that the forecasts on which long run incremental cost (**LRIC**) determinations will be based are likely to be materially more reliable than TNSP forecasts, particularly when it is accepted in the Pricing Report that the access forecasts used in the LRIC model should be consistent with assumptions made in TNSPs' regulatory determinations and peak local demand forecasts are in fact to be taken from the TNSP's own Annual Planning Reports.

The model shows that access prices are highly sensitive to the short-medium term firm access and peak load growth assumptions. In the event of forecasting error then a generator will pay too much or too little for the firm access that they secure. Whereas the transmission planning process within the RIT-T framework is revisited and can be recalibrated at regular intervals, the access payment endures for the life of the access term. Accordingly, it is not clear how the OFA pricing model is superior to the RIT-T framework in optimising network development.

6. Material error and queuing impacts

For investor certainty there may be an argument for fixing firm access payments over the access term. However, as the model seems fairly sensitive to cost inputs, baseline flow assumptions and projections of other firm access requests at the same node, a process of revision for material error may be appropriate. It is not yet clear whether establishing a queuing mechanism – something that we understand is currently being contemplated – will exacerbate or ameliorate the risk that firm access generators at the same node and reasonably close in time find themselves paying materially different access prices.

Our understanding is that a generator has no satisfactory mechanism to manage a situation where it finds itself paying a materially higher access price than subsequent firm access generators at the same node. For obvious reasons, the generator would have difficulty selling that firm capacity in the secondary market, and it is not clear what options a generator will have to terminate their firm access agreement or to pursue a strategy of repeat short-term firm access requests. The Pricing Report states that '*the parties responsible for providing inputs to the model should over time become more familiar with what these inputs should be*' and so the model's accuracy should improve over time. This seems unlikely to satisfy an early access seeker which has been materially mispriced.

Instead the access seeker might want to test the access price at various capacity levels and access term combinations so as to optimise its investment. This would seem to be aligned with the general aim of OFA (i.e. transmission and generation investment optimisation). However it is not clear whether the queuing mechanism that is under discussion would permit this kind of exploratory exercise for the reason that making a series of access requests that are subsequently withdrawn or do not complete may distort the access pricing engine or cause problems in the management of these and other prospective generators' requests. This may be a difficult issue to resolve.

7. Baseline and renewal assumptions

The assumptions underpinning the baseline and growth scenarios require careful consideration given the fundamental role these play in determining access prices. For example, the Pricing Report seems to reveal mixed results from a shortening or a lengthening of the access term. It seems that in some cases the access seeker may have an incentive to choose an access term just shy of the next lumpy expansion to manage the risk of material access mispricing, but in other cases it might choose the certainty of a longer term and potentially a higher overall but lower annualised access charge. If there is scope for these kind of strategic decisions regarding access term and investment risk mitigation, then access pricing inaccuracies may result if too high-level or crude assumptions are made regarding likelihood of renewal (e.g. by assuming that firm access will generally not be renewed but transitional access will be). Such assumptions might also cause a divergence from the forecasting information sourced from the NTNDP and raise questions about how these are reconciled.

8. No replacement or maintenance costing

In a low and declining demand scenario, there is likely to be only occasional need for network augmentation to accommodate new generation capacity. Rather, the costs that existing generators place on the network (including in the event they renew their transitional firm access allocation) would more often be in the nature of maintenance (including replacement) expenditure. Accordingly, it would seem important that the model have the capability to price this form of access cost and allocate it appropriately between continuing firm generators and other network users (loads). However, as with augmentation costs, the most economically efficient option should be pursued for an aging asset. We would expect there to frequently be solutions which extend an asset's life beyond original investment or design expectations that do not require full asset replacement.

As a caveat to the above, it is currently unclear how general transmission reliability obligations intersect with a firm access request in circumstances where existing

network capacity is sufficient to accommodate the firm access seeker and no additional network maintenance expenditure would be required beyond that necessary to meet existing reliability obligations. We would expect the LRIC to approach zero in this case, but it is not clear that the prototype pricing model would produce this result.

9. Anomalies between theoretical assumptions and preliminary model results

Figure B.1 depicts at a high level the expected relative access price outcomes that would result from adopting either a LRMC, LRIC or deep augmentation approach to access pricing. However these relativities do not always appear to be borne out in the prototype results. For example, the results for north east and south west Victoria shown in Figures B.6, B.7 and B.15 indicate that although LRMC is greater than LRIC (indicating that incremental usage is less than initial spare capacity), the deep connection costs are not zero and in many instances are greater than the LRIC result. Similarly anomalous results appear in the South Australian and Queensland examples.

10. Negative access charges

The principle of not rewarding a generator which defers an expansion by locating in a particular part of the network seems to contradict the stated aims of the OFA framework. Although this has long been a feature of the proposed OFA framework, we question whether it should be revisited.

The Report appears to assume that, although the current prototype model is fairly rudimentary and very low accuracy, there will be a means to improve it to a satisfactory level prior to any implementation. We would like to see this proven to be the case before the model is used in a formal assessment of the benefits (or otherwise) of the OFA framework, and certainly before any decision to proceed is made. The Report notes that for LRIC to be as reflective as possible of actual costs, critical features that determine long run incremental cost characteristics must be reflected in the methodology. We do not currently have confidence that the prototype model achieves this.

Please note that we have attempted to limit the comments in this submission to the design of the prototype access pricing model specifically, and not the proposed OFA framework more generally (despite the issues having various degrees of interdependence). We intend to detail our broader concerns about the framework in January 2015 in response to the AEMC's Request for Comment.

Should you have any questions in relation to this submission, please contact Eleanor McCracken-Hewson, Wholesale Market Advisor, on (03) 8633 7252 or EHewson@agl.com.au.

Yours sincerely,

Duncan MacKinnon

Manager, Wholesale Markets Regulation