

11 December 2014

Anne Pearson
Senior Director
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Level 9
99 Gawler Place
Adelaide SA 5000
Postal Address:
GPO Box 2010
Adelaide SA 5001
T 1300 858 724
F 08 8410 8545

Dear Anne

Optional Firm Access (OFA) Supplementary Report on Pricing, Reference EPR0039

Thank you for the opportunity to provide comments on the OFA pricing model. The process for calculating charges for access rights is difficult and contentious. However, a regime which attempts, imperfectly, to establish cost reflective prices is likely to achieve more efficient outcomes than a regime which does not attempt to provide price signals.

We agree with much of the Commission's analysis as set out in the supplementary report:

- We agree that it is unrealistic to seek to develop a pricing model that is perfectly cost reflective
- We agree that in theory, the long run incremental cost (LRIC) approach is the most cost reflective pricing model¹

However, developing an LRIC model which finds an appropriate balance between accuracy and accessibility is difficult. We note that the AEMC has not proposed an LRIC methodology in other contexts – for instance in setting charges for distribution or interconnectors – presumably because of the practical difficulties associated with LRIC.

AEMO agrees with the Commission's characterisation of the limitations of the prototype model. We are concerned that these limitations will be problematic to resolve. Indeed, the challenges associated with reflecting complex problems in a stylised model has the potential to be unworkable.

In particular, there are a range of different types of stability issues (such as transient stability and voltage collapse) which may or may not be relevant, depending on the circumstances. Some of these issues arise because of the unique characteristics of the Australian network, which is unusually long and "stringy". The solutions to these issues tend to be bespoke and the associated costs are highly variable. For the LRIC model to be broadly cost reflective it will be necessary to test every connection point for each type of constraint under a range of different scenarios.

The costs involved in addressing stability constraints have the potential to have a major impact on model outcomes. For instance, the current prototype model identifies the La Trobe Valley as a location which has very low LRIC prices. However, it is foreseeable that a new large generation plant connecting into the 500kV network in the La Trobe Valley could

¹ We note that the Commission's proposal deviates from the theoretical conception of an LRIC model in that prices are determined on a once off basis rather than varying over time.

increase the stability issues for the Victorian and wider grid. A conventional network augmentation based solution to this would be a new 500kV between Hazelwood and South Morang, at a cost of several hundred million dollars. This network augmentation cost is not currently reflected in the model at all, as it is not addressing a thermal issue.

The lumpiness of transmission investments and impact of economies of scale mean that it is also challenging to make assumptions with respect to the size of the incremental upgrade triggered by an access request. These assumptions are arbitrary and can have a large impact on price.

Given these technical challenges, an LRIC model that sends reasonably accurate price signals is likely to be extremely complex. In practice, it may be impossible to find an acceptable compromise between cost reflectivity and transparency. There is a risk that the challenges associated with the LRIC pricing model could drive inefficient network investment. Under an LRIC approach, if there are disparities between actual costs and the outputs of the LRIC model, customers and generators will be affected by inefficient windfall gains and losses. When forecasts are uncertain due to changing market conditions, these windfalls have the potential to be significant.

The supplementary report notes that when there is zero (or negative) forecast growth on an element, then the outputs of an LRIC pricing model should be the same as a deep connection charge.²

Electricity demand in the National Electricity Market (NEM) has been in decline for the past five years and is forecast to flatten over the next decade.³ The trends that contribute most to reduced electricity consumption show no sign of abating: improvements in energy efficiency, changing consumer behaviour and shifts in the structure of the Australian economy away from energy intensive industries.

Given current market conditions, there are some practical advantages associated with deep connection charges which mean that it is worthwhile to give further consideration to this approach. It is possible that a deep connection charge will give more cost reflective results in the case of zero or negative demand growth because the costs associated with each access request are individually assessed rather than by reference to a stylised model.

Both models have pros and cons, and the relative advantages of each model depend on how the market develops. A deep connection charging approach may give superior outcomes to an LRIC approach if the following conditions are satisfied:

- demand continues to plateau/fall or is highly uncertain, and
- requests for long term firm access are relatively infrequent.

It may also be relevant to consider whether asset retirements are likely to lead to material shortfalls in required network capability.

The AEMC could consider deep connection charges as part of a simplified version of OFA.

AEMO notes that notwithstanding the difficulties associated with LRIC identified in this submission, the LRIC pricing methodology could offer a substantial improvement over the

² AEMC, *Supplementary Report: Pricing, Optional Firm Access, Design and Testing*, 31 October 2014, page 60.

³ AEMO, *2014 National Electricity Forecasting Report*, 16 June 2014. See http://www.aemo.com.au/Electricity/Planning/Forecasting/~/_media/Files/Other/planning/NEFR/2014/2014%20Updates/NEFR_final_published_Nov_2014.ashx

Cost Reflective Network Pricing methodology currently used by TNSPs to set transmission use of service (TUOS) charges. Historically, transmission customers have been willing to accept a low level of cost reflectivity in their TUOS charges. This may make it easier to develop a model which reaches an acceptable compromise between cost reflectivity and transparency.

Conclusion

At present the NEM is characterised by surplus generating capacity, low or no growth and a high level of network investment in recent years. This does not appear to be the right environment in which to apply the (limited) form of LRIC pricing proposed. If you would like to discuss this submission, please contact Jess Hunt on (08) 8201 7315.

Yours sincerely



David Swift
Executive General Manager, Corporate Development