Electricity Network Economic Regulatory Framework Review

Response to the AEMC Approach Paper

Energy Consumers Australia

Response to the AEMC Electricity Network Economic Regulatory Framework Review: Approach Paper Dec 2016

Executive Summary

Energy Consumers Australia welcomes the Australian Energy Market Commission's (AEMC or the Commission) approach to the task of annual reviews of the electricity network economic regulatory framework.

In this response we make a number of high level observations on matters raised in the Approach Paper (the Paper). Our observations are structured under three themes; the opportunity presented by the review, observations on the approach and observations and observations about the current state of the market.

Energy Consumers Australia has separately provided responses to the Approach Paper on the Distribution Market Model. Our observations in that paper are not repeated here.

A key motivation for the review was the stress test that identified the risk from underutilisation of network assets. As demand has already been declining but networks were slow to react to that decline there is already extensive underutilisation.

The economic regulatory framework is very complex and informed discussion for the review would be facilitated by the Commission publishing a simple summary of the whole regime as an early output.

Opportunity Presented by the Review

The COAG Energy Council has tasked the Australian Energy Market Commission (AEMC or Commission) to monitor developments in the energy market, including the increased uptake of decentralised energy, and provide advice on whether the economic regulatory framework for electricity transmission and distribution networks is sufficiently robust and flexible to "continue to achieve" the national electricity objective (NEO) in light of these developments.

This referral from the Energy Council follows the "stress testing" of the regulatory framework against the four scenarios used by the CSIRO for the *Future Grid Forum*. These are the same scenarios used by Energy Networks Australia in its Network Transformation Roadmap project.

The most critical area of concern identified was the possibility of asset under-utilisation/stranding of assets. The stress test also identified a number of areas where the key risk is how the AER exercises its regulatory discretion. Service classification was highlighted as one of these areas.[1]

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[1] Network Strategy Working Group *Electricity network economic regulation; scenario analysis – Policy Advice* COAG Energy Council June 2015

Energy Consumers Australia welcomes the review and thanks the Commission for sharing the Paper. We appreciate that the Review sits alongside other projects currently being pursued by the Commission.

Energy Consumers Australia is encouraged by the Commission's approach to these tasks, and we urge the Commission to take the opportunity to continue with this work to develop a coherent reform program to further promote the long term interests of consumers.

Observations on the Approach

Energy Consumers Australia agrees that the question "Does the economic regulatory framework allow and incentivise networks to adapt to the extent necessary to changes in the market, including increased decentralised supply?" is a useful guide to conducting the review.

There are three observations we wish to make on the approach over all; what is meant by 'the economic regulatory framework', the centrality of consumers, and the early decision on the areas of focus.

The economic regulatory framework

The phrase 'the economic regulatory framework' is open to interpretation. The Paper states the Commission will be focusing on the economic regulatory framework set out in chapters 6 and 6A of the National Electricity Rules and relevant jurisdictional instruments such as reliability standards.

This is a narrow conception of the economic regulatory framework.

The term 'regulation' is pen to multiple definitions. For the purposes of policy in Australia it is convenient to use the definition provided in the Australian Government Best Practice Regulation Handbook:

> *Any 'rule' endorsed by government where there is an expectation of compliance, for example, primary legislation (Acts), subordinate legislation (legislative or non-legislative instruments), treaties and quasi-legislation*.[2]

'Economic regulation' is a specific subset of regulation that is open to multiple definitions. Freiberg provides a catalogue of various modes of economic regulation which are divided into two categories; making markets and influencing markets. The modes covered by these are:

> *Making Markets – auctions; tenders; tradeable permits or 'cap' and 'trade' mechanisms; and other market-making approaches.*
>
> *Influencing markets – information provision; price regulation; taxes, charges and levies; bounties, subsidies and levies; tax expenditures; and other market-influencing approaches.*[3]

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[2] Australian Government *Best Practice Regulation Handbook* 2007 at Page xiii
[3] Arie Freiberg *The Tools of Regulation* Federation Press 2010 at Pp 110-111.

Almost all of the provision of the National Electricity Law (the NEL) and Rules (the NER) falls within this definition. The making of a wholesale market is economic regulation. The decision to separate potentially competitive services from natural monopoly services is economic regulation.

Chapters 6 and 6A are focused on a very narrow aspect which is the procedures to be followed by the Australian Energy Regulator (the AER) in price regulation. Even these provisions need to be read in the wider context of the NEL; for example, the revenue and pricing principles constitute an explicit guarantee that a network operator's efficient costs can be recovered, hence reducing risk from that investment.

In the specific context of the regulation of electricity services, the NEL provides a definition of the AER's economic regulatory functions and powers:

> ***AER economic regulatory function or power*** *means a function or power performed or exercised by the AER under this Law or the Rules that relates to—*
>
> *(a) the economic regulation of services provided by—*
> *(i) a regulated distribution system operator by means of, or in connection with, a distribution system; or*
> *(ii) a regulated transmission system operator or AEMO by means of, or in connection with, a transmission system; or*
> *(b) the preparation of a network service provider performance report; or*
> *(c) the making of a transmission determination or distribution determination; or*
> *(d) an access determination.*

This, however, is a specification of the AER's functions or powers, not a specification of the economic regulatory framework.

Even if the focus is narrowed to the provisions of the two chapters, and hence of the AER's price regulation powers, this 'framework' is nowhere clearly described. The framework at the minimum includes:

- The framework and classification stage
  - The form of regulation (no regulation, direct control, negotiate/arbitrate)
  - The control setting methodology (alternative control or standard control)
  - The form of price control (revenue cap, price cap or hybrid)
- The elements of the building block model and associated guidelines
  - Rate of return
  - Regulatory depreciation
  - Capital expenditure
  - Operating expenditure
  - Incentive mechanism (increment or decrement)
  - Corporate tax
- Additional incentive schemes
  - Efficiency Benefit Sharing Scheme (EBSS)
  - Service Target Performance Incentive Scheme (STPIS)
  - Demand Management Incentive Scheme (DMIS)
  - Capital Expenditure Sharing Scheme (CESS)

The framework above does not include the additional requirement for Tariff Structure Statements.

Energy Consumers Australia suggests that the AEMC should publish a statement laying out in simple language a complete description of the economic regulatory framework that it is considering to be the subject of the review as an interim step before the preparation of the final report.

The centrality of consumers

The objective of the national electricity markets is to promote the long term interests of consumers. Economic efficiency in all its dimensions will promote these interests. However, once all the fine economic theory is processed the simple conclusion is that the goal is achieved when current and future consumers pay no more than they need to.[4]

Clearly the market bodies share this objective. There can be a tendency, however, for market bodies to assume that industry participants are antagonistic to this objective. This is the view that consumers in seeking low prices want networks to be undercompensated – and that therefore the role of the regulator is to “balance” the interests of networks and consumers.

This is an incorrect interpretation of the interests of consumers – consumers have no interest in under-investment leading to reduction in reliability or security of supply.

This point was well made by Scott Hempling at the 2016 AER/ACCC Regulatory conference. In arguing that regulators should replace ‘balancing’ with ‘aligning’ he noted:

> *The default approach to hearing procedures reflects a misunderstanding of the regulatory purpose. That purpose is not to "balance" the interests of shareholders and consumers. A balance presumes opposition of interests. But customers' and shareholders' legitimate interests—reasonable prices, reasonable returns, satisfied customers and satisfied shareholders—are consistent and mutually reinforcing. High-quality performance and efficient consumption benefit multiple interests: consumers, shareholders, bondholders, employees, the environment and the nation's infrastructure.* [5]

In the context that consumers are central to the market objective and that the function of regulators is to align not balance interests it is somewhat disappointing that the Paper seems to have left consumers out of the list of stakeholders when it said:

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[4] Energy Consumers Australia *Interpreting the LTIC: Assessment of the Long Term Interests of Consumers* ECA Research Report No. 1 at http://www.energyconsumersaustralia.com.au/documents/Interpreting-the-Long-Term-Interests-of-Consumers.pdf

[5] Scott Hempling *Effective Regulatory Procedures: Purposes, Practices and Paths* Presented to the Australian Competition & Commerce Commission/Australian Energy Regulator Conference in Brisbane, August 2016 at https://www.accc.gov.au/system/files/Presentation%20by%20Scott%20Hempling,%20Attorney%20at%20Law,%20Maryland%20,%20USA,%20commentator%20on%20the%20Effective%20Regulation%20of%20Public%20Utilities.pdf

> *Stakeholder consultation will form a large part of the review process. As well as consulting with the AER, AEMO, network businesses, retailers and relevant agencies, the AEMC will also be seeking to consult with start-ups and new technology companies to assess the economic regulatory framework for electricity networks.*
>
> *Feedback from stakeholders will give us an up to date view of the issues faced by those in the industry.*

Energy Consumers Australia will engage with the Commission through the course of the review. We encourage the Commission to actively consult with a broad cross section of consumers and consumer advocates in the course of the review.

Areas of focus

The Paper has foreshadowed that each annual review the AEMC will “identify key risk factors and emerging themes for potential challenges that may be faced by the regulatory framework in the near to medium term.” The AEMC suggests that the identified themes “could be used as priority areas for the COAG Energy Council to focus on for future reforms.”

Energy Consumers Australia welcomes the approach of identifying key risk actors and emerging themes. We do, however, encourage the Commission to do more than simply leave these as areas that the COAG Energy Council might, or might not, use as the focus of future reforms. In the AEMC’s role as the developer of the overall National Electricity Market it is in the long term interests of consumers for the Commission to pursue to finality key risks, not just to report them.

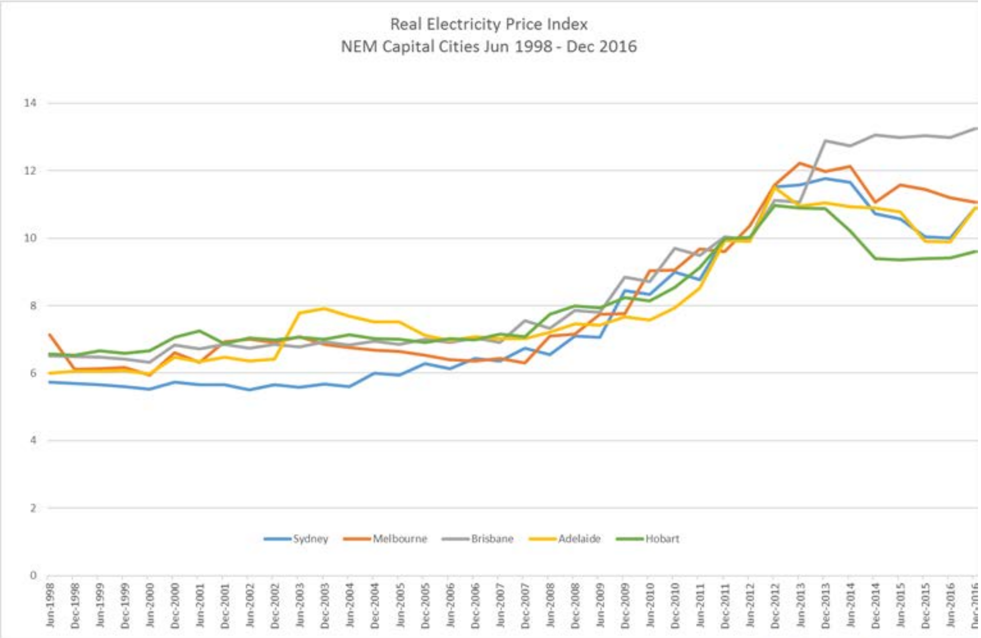
The Paper also states that the Commission has already identified three preliminary priority areas for the 2017 review arising from other consultation work. Energy Consumers Australia is concerned that even a preliminary selection is premature in the context of the review. While the three issues identified are important, they are not necessarily the most important. The selection of preliminary priority areas may discourage the identification of other priorities.

An alternative approach to the identification of priority areas would be to focus on the core area of failing of the current market arrangements – high real electricity prices and a resumption in most jurisdictions of increases in those prices. The economic regulatory framework has already contributed to these high prices and a focus of the review should not only be on how to ensure further increases don’t occur but to address the existing high network costs. Observations on areas that might be fruitfully explored are provided in the next section.

Observations about the current state of the market

Consumers in the NEM markets know that electricity prices are high and in most markets are continuing to increase. Figure 1 shows the real electricity price index for NEM capital city markets from June 1998 to December 2016. Price declined in all markets except Brisbane following the repeal of the carbon tax. However, they are now returning to close to the 2013 level in other markets, a position that the Minister for Energy and the Environment referred to as 'an all too brief respite.'[6]

Figure 1: Real NEM electricity price index



Network costs as a contributing factor

In particular, the ongoing issue of over investment in distribution networks as a consequence of incorrect forecasts from 2008 and deterministic reliability standards in NSW and Queensland continue to be a source of higher than necessary network prices.

While there has been recent focus on the functioning of Limited Merits Review and the opportunity it has provided networks to obtain upward revision of regulatory determinations, there has been no systematic response to the over-investment problem. In the context of the current review this translates into a current 'asset underutilisation' problem.

A useful outcome from the review would be to measure the current level of asset underutilisation for each network and to report this annually. This, after all, was the risk identified by the stress testing.

The move to cost-reflective pricing goes some small way to addressing another of the aspects of the change in demand, that being that while annual consumption has declined per connection, the demand at network peak has declined very little at all. This is issue would have arise even if the overinvestment from incorrect forecasts had not occurred.

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[6] The Hion. Josh Frydenberg Minister for Energy and the Environment *Speech* 'ECA Foresighting Forum Opening Address 20 Feb 2017
http://www.joshfrydenberg.com.au/guest/SpeechesDetails.aspx?id=410

Approaches to price determination

The current approach to price determination suffers from three fundamental flaws.

The first is that the approach to WACC estimation starts with a flaw in equating the actual return on equity achieved by an efficient benchmark firm with the return on equity that an investor would require to make the investment. This error is most dramatically revealed in the prices paid by investors for regulated networks, which are typically in the range of 1.5 times the regulatory asset base. As about 60% of revenue allowance is made up of return on investment that means there are insufficient operating cost savings to make up the difference.

The purchase price for regulated networks clearly shows that the rate of return being received by investors is much higher than their actual cost of capital for making the investment. In part this flaw arises from the inconsistency between the certainty of return being provided by the framework (in particular, the revenue and pricing principles) and the assumption that networks are exposed to an investment risk.

A further flaw is revealed by the process of "benchmarking" itself. The relevant firms for benchmarking are regulated businesses. The returns of these businesses are determined by regulators, not markets. There is a circularity to a benchmarking process, regulators aren't getting a market estimate they are getting an estimate based on the historic decisions of regulators.

Benchmarking of efficiency measures is, however, a productive exercise. However, the benchmarking is only conducted on historic costs. In the UK the network determination processes for like networks are aligned so the regulator is also able to benchmark the operators on their projected costs. This provides the opportunity for the regulator to extract greater efficiency improvements by determining the efficiency frontier for the end of the regulatory period from operator data rather than merely as a projection from current data.

Finally, the price determination effort is still not grounded in a highly effective consumer engagement model. All the networks are making an effort to improve their consumer engagement, but they are in part hampered by having no regulatory benefit from doing so.

Actual profitability

The 2016 Energy Consumers Australia funded research report *Assets or Liabilities?* raised a number of issues in relation to the approach to economic regulation.[7] Among other things, the report attempted to compare the actual profitability of network businesses with other businesses including regulated (Telstra) and unregulated firms. The paper focused on the Queensland transmission business Powerlink and asserted that Powerlink's "profitability" was 15.5 times that of Telstra and 10.5 times that of BHP (as two examples from the report).

The methodology used in the report can be questioned, in particular whether the returns were compared to the correct asset base (i.e. that a consistent approach was taken).

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[7] Hugh Grant 2016 *Assets or Liabilities?: The Need to Apply Fair Regulatory Values to Australia's Electricity Networks*, ResponseAbility for EUAA 5 May 2016 available at http://www.euaa.com.au/files/documents/Assets-or-Liabilities-The-Need-to-Implement-Fair-Regulatory-Valuations-for-Australia-s-Electricity-Networks-Final-Version-5-May-2016.pdf

The issues raised in that report apply equally to distribution networks.

Under section 28V of the National Electricity Law AER may prepare a report on the financial performance or operational performance of 1 or more network service providers in providing electricity network services. The AER may only prepare a report under if the preparation of the report will or is likely to contribute to the achievement of the national electricity objective.

The AER prepared such a report in June 2015 for the years 2011 – 2013.[8] The AER stated "Our objectives in publishing network performance reports are to educate stakeholders, promote transparency, and to enhance accountability. In this way the reports act as an incentive for NSPs to improve performance."

Section 28V(2)(a)(iii) says the AER may report on "the profitability of network service providers in providing electricity network services." The AER report, however, only includes revenue and expenditure data and no estimate of profitability.

Ultimately profitability is a measure of how well the regulatory framework is operating to efficiently compensate network operators. Energy Consumers Australia believes the failure of the AER to report on profitability presents an opportunity for reform, and that the profitability data would be of assistance to the AEMC in conducting the annual reviews.

Conclusion

Energy Consumers Australia in this short response to the Approach Paper has indicated that alternative priority areas for the review would be the extent of existing asset underutilisation, the over estimation of the WACC through benchmarking, further improvements to efficiency benchmarking and reporting on network profitability.

We look forward to continuing to work with the Commission through this and future annual reviews.

[8] AER *Electricity distributors 2011–13 performance report* June 2015 available at file:///D:/Box%20Sync/Research/Resources/Resources/AER%20Reports/Distribution%20Network%20Performance%20Reports/Electricity%20distributors%202011-13%20performance%20report%20-%20June%202015.pdf

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