

Economic Regulation Authority Perth BC, PO Box 8469 PERTH WA 6849

Submitted by

to publicsubmissions@erawa.com.au

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## Report to the Minister for Energy on the Effectiveness of the Wholesale Electricity Market 2017/18

The Australian Energy Council (AEC) welcomes the opportunity to make a submission to the Economic Regulation Authority's 'Report to the Minister for Energy on the Effectiveness of the Wholesale Electricity Market 2017/18 Discussion Paper' (Report). The AEC is the industry body representing 23 electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. These businesses collectively generate the overwhelming majority of electricity in Australia and sell gas and electricity to over 10 million homes and businesses.

The AEC understands that the ERA is required to review and prepare a report for the Minister for Energy on how effectively the Wholesale Electricity Market (WEM) has met its objectives.

## **Overarching Comments**

The AEC believes that the Report should be considered as an important record of WEM effectiveness but that a government response to the Report should await outcomes of the:

- 1. Current WEM reform program, and
- 2. Conclusion of the investigation into Synergy's pricing.

We also note that the Report is only up to June 2018. There are rule changes in progress such as Full Runway Allocation of Spinning Reserve Costs, and Removal of constrained off compensation for Outages of network equipment; together with WEM Reforms targeting benefits from such things as a constrained access framework and improvements to the capacity pricing mechanism; all of which are likely to improve market outcomes.

With respect to wholesale generation prices, the Report focusses on the balancing market reporting -"Wholesale electricity prices in the Wholesale Electricity Market (WEM) have increased by just under 50 per cent in the last six years<sup>1</sup>". However, Figure 3 in the Report (copied below with the addition of a trend arrow for total generation cost) shows that whilst energy prices have increased, the overall generation<sup>2</sup> cost has declined over the six-year period. The AEC believes the generation cost as a whole should be considered in reviewing the market effectiveness rather than just the energy component. After all, investments are made in assets, which provide capacity, energy and ancillary services.

We also note the Report has portrayed ERA's concern in relation to Synergy's market power, for example stating: *"there has been no change in the number or market share of small, standalone retailers*<sup>3</sup>". The paper also notes Synergy's market share has declined due to existing competitors, and data from AEMO<sup>4</sup> indicates

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<sup>&</sup>lt;sup>1</sup> Page 3 of report

<sup>&</sup>lt;sup>2</sup> Energy, capacity and ancillary services costs

<sup>&</sup>lt;sup>3</sup> Page 8 of report

<sup>&</sup>lt;sup>4</sup> http://data.wa.aemo.com.au/#facilities

that 174MW of new (non Synergy) generation has been commissioned since FY18, accounting for over 3% of total capacity. Commentary in the Report pertaining to Synergy's market power therefore appears to be speculative and premature, and should await the results of the current investigation into Synergy's pricing.

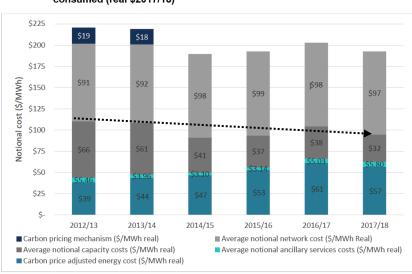


Figure 3: Notional costs of wholesale electricity supply per unit of energy consumed (real \$2017/18)

Source: ERA analysis of AEMO and Clean Energy Regulator data.



The AEC makes a number of high-level observations on the WEM investment environment, noting several challenging areas described below which all serve to create increased uncertainty in project returns:

- 1. Policy
  - a. How current national policy proposals will play out and influence state policy is unclear, but the lack of a clear national carbon policy, coupled with the extended reform process at the State level, increases investment risk. The AEC agrees with the ERA in that there is also a lack of clear carbon policy, and it appears new generation build is stalling as a result of the Renewable Energy Target being met, and targets not increasing past 2020.
  - b. Various state based reforms have been in progress for a number of years however, market participants feel reform is yet to deliver the necessary transformations. There is tension between delivering short term wins that make the current market perform better versus a sense that the reform program may need to be more focussed on the emerging energy paradigm.
- 2. Market
  - a. Residential and commercial customers are making investment decisions based on incomplete or distorted investment signals, which in aggregation has the capacity to distort efficient market operation. The AEC agrees with the ERA that tariff reform must be considered to encourage efficient use of distributed energy resources, and to ensure visibility of these resources to the broader market.
  - b. Market dynamics are changing, leading to higher uncertainty in future project revenues in both the capacity and energy markets. In addition, barriers to entry currently exist for some market participants as per the ERA example in relation to entry of battery technologies, which may ultimately inhibit market effectiveness. Market reforms must be technology-neutral and ensure a level playing field is maintained for existing and new generation. Reforms must take a holistic

view of the outcomes provided to all consumers, and ensure minimal cross subsidisation occurs between customer segments.

- c. Uncertainty has arguably increased overall concerning the future demand for centrally dispatched electricity with the Electricity Statement of Opportunities June 2018 stating 'Rapid uptake of rooftop photovoltaic (PV) continues to reduce peak demand and operational consumption. The ESOO further states that 'Rooftop PV installations are forecast to grow at an average annual rate of 8.7% over the outlook period under the expected growth scenario'<sup>5</sup>.
- 3. Technology
  - a. Rapid changes in technologies (supply and demand side) create uncertainty in the best choice of technology and timing of investments, deployment location (centralised versus distributed) and the flow on impacts to viability of business models.

In relation to market administration costs, it is noted that the unit cost is high but that also the WEM is a small market. The AEC is concerned that the difficulties of administering an increasingly complex system brought about by the continued growth of DER will act to further increase these costs. Therefore, care must be taken not to over invest in market administration. The AEC also believes that participant fees should relate to costs of operating the market and accordingly market participants should not pay for government led market reform.

# Background

There are many reforms identified in the current WEM reform program that aim to address known shortcomings within market mechanisms, such as those that exist within ancillary services and network access. We note that these items are not addressed in this paper, and instead, the paper has focussed on:

- Rising wholesale electricity prices
- Future investment environment
- Market administration

## Pricing trends in the WEM and potential drivers

1. What other factors may be driving up wholesale electricity prices if not demand or fuel costs?

We restate from our 'overarching comments' that the generation cost as a whole should be considered in reviewing the market effectiveness and not just the energy component.

Another potential driver of energy cost may be that whilst facility run times may have remained stable, output in MWh may have reduced due to displacement of conventional generation by renewable generation, both large-scale and behind-the-meter resulting in start-up and shut down costs being distributed over fewer MWh. This would lead to higher unit costs and result in higher bid prices. In addition, if facilities run at a different output, they may be running at a lower point on the generator efficiency curve, again leading to a higher cost per MWh.

2. Do market participants consider generators are changing their bids into the balancing market to recover higher start-up and shut down costs over shorter run times?

No comment.

<sup>&</sup>lt;sup>5</sup> Electricity Statement of Opportunities June 2018 page 3

3. Is the market applying sufficient pricing discipline on generators in light of the high level of concentration in the WEM?

If the market is efficient, one would expect new generation to enter the market when the price is sufficiently high. This is also important so that the market can innovate and develop new products and services. Government should not be fearful of allowing the market to work, and prices to rise in order that the private sector receives an appropriate investment signal. Noting that uncertainty over energy policy will inevitably attract a risk premium to that investment decision.

Also as already stated the overall generation cost has declined over the last six years.

4. Aside from disaggregation, what other measures could improve competitive discipline in the WEM? How would these measures work?

The AEC notes that the combination of falling generation cost (energy plus capacity) and decline in Synergy's market share is a positive sign of improving competitive discipline. Given clear investment signals such as certainty in energy policy and appropriate forewarning of plant closures, one would expect continued improvement in competitive discipline.

5. What other factors should the ERA consider that may underlie wholesale price increases in the WEM?

No comment.

## Future risks and the investment environment

6. Are market participants satisfied that innovation trials are sufficiently open to participation from entities independent of government?

The AEC supports trials of innovative products and services in pursuit of improvements to market and system efficiency and ultimately to support lowest prices for consumers. Regulatory barriers currently exist restricting open participation in innovative trials; in particular restricted retail access to residential customers and business customers who consume less than 50 MWh p.a. Trials should be open to all market participants. If not, trials should at least be designed with transparency and for the benefit of designing market rule changes that ultimately support open access. Care should be taken not to inadvertently provide any participant with a competitive first mover advantage. In addition to the above example, other forms of regulatory barrier also exist - another example being the ability to introduce Hydrogen into the domestic gas supply.

Further to the above comment we note that in some cases regulations exist that are arguably fit for purpose (for example customer protections, safety). When trials are conducted, it should not be a case of providing a carte blanche to those participating in the name of innovation. Consideration must also be given to who is liable when trial outcomes do not transpire as intended.

# 7. To what extent do market participants rely on, or derive benefit from, the electricity statements of opportunity in planning and investment decisions?

The electricity statement of opportunities is a useful document but is ultimately dependent on the assumptions made in the study. The AEC supports development and robust testing of assumptions to be done in conjunction with market participants.

8. Should market participants signal intended or probable plant retirements at least three years in advance, as has been suggested in the National Electricity Market; or, should the market operator undertake its own analysis of the probable plant exit dates?

The AEC feels it is reasonable that generators flag plant retirement three years in advance, but should not be bound by a date, as generators are subject to unforeseeable events, which can affect their ongoing operability. The AEC would support provisions that allow for a broad interpretation of

unforeseen circumstances. The PUO has indicated that they will draft regulatory changes in relation to signaling of plant retirement for industry comment. We flag particular attention be brought to:

## Conflict with other Acts

Potential conflict between obligations for three years' notice to be given of an expected closure, and the duties of directors under the Corporations Act 2001 (Cth), and other acts such as occupational health and safety and environmental protection acts. Any regulation should clarify, for the avoidance of doubt, that those acts should take priority over any proposed market rule.

### Directors' Duties

Secondly, directors may also become aware of progressive changes in circumstance that will require them to act pursuant to other obligations. The AEC therefore recommends that any definition of unforeseen events beyond the reasonable control of a generator should be broadly defined to include changes in circumstances which might not be able to be linked to specific events, and consider directors' responsibilities under other acts.

## Expected Closure Date

Thirdly, that any expected closure date be allowed to be specified later than the expiry date of a generator's licence or authority to generate. It is not uncommon that various licences or other authorities may have an expiry date well within the technical and economic lifetime of the generator, and that the generator may form a reasonable view that these will be extended or replaced prior to their expiry. For example, this is known to occur with environmental licences and network connection agreements. To ensure that AEMO has the best information available, the AEC would recommend that any closure date should not be unconditionally limited.

9. If not advanced notice of plant retirements, what other mechanisms could be used to signal investment opportunities and improve the operation of the capacity mechanism?

No comment.

10. To what extent do policy uncertainty and behind-the-meter changes in generation and storage influence decisions to develop projects in the WEM?

There is a lack of clear carbon policy nationally, and it appears new generation build is stalling in relation to the plateauing of the Renewable Energy Target. It also remains unclear how developing WA climate policy will interact with a national framework.

State based reforms pertaining to full retail contestability, tariff reform and distributed energy resources will no doubt impact both the operation of the existing market, as well as dictating interactions between centrally dispatched and behind the meter solutions. For better or worse, this will likely be the case in the advent or absence of reforms. Uncertainty in Policy and the growing impacts of DER on the market already exists and makes it more difficult to forecast future demand for centrally dispatched electricity. The market size may in future be smaller.

The AEC emphasises the need for policy and regulatory flexibility to allow the market to best meet the market objectives, in short to supply affordable reliable electricity.

In addition, more generally, rapid changes in technologies (supply and demand side) create uncertainty that can make investment more challenging. Technology changes will not be limited to appliance efficiency improvements and new generation sources. As homes become "smarter", old appliances are replaced with internet-connected devices, and new appliances such as home assistants and smart watches become commonplace, the opportunity for more localised supply and demand control exerted either by consumers, service providers or artificial intelligence become more likely scenarios. This creates challenges as to the best choice of technology, timing of investments,

deployment location (centralised versus distributed) and the flow on impacts to viability of business models.

These changes will also change the nature of the customer relationship with retailers, and third parties such as demand response aggregators who may increasingly interact with consumers. It is important that when considering the regulatory reforms necessary, the roles of different entities are reviewed and that customer protections are maintained.

11. Do market participants consider the investment environment in the WEM is challenging? If so, why?

Refer to Question 10. No additional comment.

12. Do market participants consider the investment environment in the WEM will improve or worsen over the short to medium term? If so, what factors will drive this change?

Drawing from the responses to previous questions, the AEC believes that whilst it is by no means certain, the investment environment may become more challenging going forward.

13. What is the likelihood that the State Government will need to invest to replace generation assets?

The AEC cannot comment directly on the likelihood of the State Government investing in generation assets, but observes that a likely driver of a scenario where the private sector failed to invest would be from lack of policy certainty or poor policy. This therefore affords the State Government with the means to avoid direct investment. The AEC would oppose State Government investment in generation as it would stymy private sector investment and in the long-run reduce the benefits obtained from a competitive market. We also note that governments need to let market prices rise in the short term to signal private sector investment.

14. What could organisations such as the ERA, AEMO, Western Power and the State Government reasonably do to improve the investment environment?

Provide policy and regulatory certainty, and flexibility to adapt to new technologies and supply models that may be more efficient, and offer superior consumer experiences.

### Market administration, governance, and reform

15. Do market participants consider that market operation, administration and development expenditure is delivering the benefits anticipated? If not, is the market and its electricity consumers failing to secure the benefits because of structure, governance, lack of competition, or scale?

The AEC expresses concern to increasing governance and management complexity of WEM operations adding to the cost of market fees. The SWIS is a small electric system and management of it needs to focus on fit for purpose solutions that remain cognizant of the fact that costs are recovered from relatively small volumes. On an energy basis, the WEM is 10% of the size of the NEM yet market fees are approximately twice that of the NEM (\$0.791/MWh compared with \$0.410/MWh – FY18<sup>7</sup>). A holistic system view is necessary to avoid policies that target one part of the system increasing costs in other parts. For example, policy decisions in relation to Distributed Energy Resources (DER) can distort investment decisions such that less efficient assets are installed, and which cause increased system complexity and cost.

Attempts should be made to avoid unnecessary costs where possible. For example, given the current state of WA energy reforms, should an exemption be given to avoid creating this Report while the WEM reform is in progress, or alternatively a very short report be provided to the minister. The AEC

understands a previous version of this Report cost \$400,000<sup>6</sup>. The Report also seeks quite broad feedback from stakeholders arguably beyond the remit of the ERA.

The AEC believes that participant fees should relate to recovering costs of operating the market and accordingly market participants should not pay for government led market reform. Funding reform via market fees adds difficulty to AEMO's task of minimising participant fees. In absolute dollar terms, the WEM budget is proportionately high - approximately 36% of the NEM in FY19 (\$30.3m compared with \$83.4m<sup>7</sup>). Additional costs budgeted by AEMO to navigate the reform process will place unreasonable burden on market participants.

Any questions about our submission should be addressed to Scott Davis, Policy Adviser Western Australia by email to the second second by telephone on the second se

Yours sincerely,



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<sup>6</sup> Parliamentary Debates (Hansard) THIRTY-NINTH PARLIAMENT FIRST SESSION 2015, LEGISLATIVE ASSEMBLY, Thursday, 25 June 2015 pp 4892-4893

<sup>7</sup> All figures taken from 2018-19 AEMO Final Budget and Fees – June 2018 (https://aemo.com.au/-/media/Files/About\_AEMO/Energy\_Market\_Budget\_and\_Fees/2018/Final-AEMO-Consolidated-Budget-and-Fees-2018-19.pdf)