Energy Security Board

Lodged online: info@esb.org.au

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Consultation on a two sided market

The Australian Energy Council welcomes the opportunity to make a submission to the Energy Security Board's (ESB) consultation on moving toward a two-sided market in the NEM.

The Australian Energy Council (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 recognizes that changes in technology is changing electricity markets. New energy products are facilitating greater and different forms of consumer engagement and participation in the energy market. This is also encouraging the growth and sophistication of businesses providing related products and services, such as participation in demand response, though this business category remains small.

The AEC also notes that these new electricity business models may have complex value propositions. To date the dominant supply business model has been the corporate utility, selling units of energy to consumers in national markets.[1] The new opportunities that business model innovations are or could be creating in electricity could offer significant benefits to the electricity system and also generate economic, social, and environmental values that are not well accounted for in current policy or regulation.[2] The AEC believes that the development of a two sided market will be an important enabler to this.

We also recognise that there may be economic, social, and environmental values generated from new business models, along with advances in renewable energy, demand management and energy efficiency technologies and services. But for the near future, constant changes in technology, industry practices, and communications will all impact innovation. There is consequently a very high degree of uncertainty as to what will actually eventuate. Our view of this market evolution is that the ESB timetable is too aggressive and we should not attempt to anticipate and regulate specific business models too early. We should hasten slowly, allow for market evolution and first test and adjust the two sided market using a voluntary two sided market model.

The AEC anticipates that customer (or customer asset) participation in demand response and other system support activities will be important to managing peak demand reliability issues. This could help to defer or replace investments in more traditional assets and if it can be done at a suitable price, plausibly minimise the overall costs for consumers. The existing reforms and trials underway around DRM and VPPs will help

[1] Business model innovation in electricity supply markets: The role of complex value in the United Kingdom, Hall and Roelich, 2016, www.elsevier.com/locate/enpol
[2] Ibid

Level 14, 50 Market Street
Melbourne 3000
GPO Box 1823 Melbourne Victoria 3001

P +61 3 9205 3100
E info@energycouncil.com.au
W energycouncil.com.au

ABN 98 052 416 083

to determine how demand side resources can best participate in the NEM and how to efficiently manage those resources. We are mindful that today participation in DRM is slim, and VPPs are in their infancy.

The consultation paper sets out a high-level concept of a two-sided market with two key types of agents: end users and traders. End users provide or receive services at a connection point, which in turn is defined as the point at which connection to or disconnection from the system occurs and where energy flows are metered. So, an end user could be anyone from a household customer to a large-scale generator. The other type of agent is a trader. They perform all trading of energy services within the market, on behalf of end users. So, they are the interface with AEMO and with networks. An end user can also be a trader.

It is not clear if these classifications are conceptual or represent the end game. The paper further notes that there could be a range of service providers "without necessarily having specific market rules and participant categories for each, as exist today". If history is our guide, this seems unlikely in practice.

How consumers are or will be sufficiently informed to set their exit and entry prices is a problem that is not considered in the paper. Whilst these could be set up to happen autonomously or in an agreed way via their retailer or aggregator as the ESB suggests, the question of what constitutes a fair deal for electricity consumers and sellers has effectively become the realm of regulators, as the history of remedies for "market failures" in the form of FiT's and DMO's is testimony. Given this history, we run the risk of stranded investment in complex enabling systems that will never be used by small customers. Price signalling, or cost reflective pricing, at a small customer level remains mute as it has done for decades. [3] Without the political will to expose customers to true cost of peak demand (or benefits of low demand) then the benefit of requiring all load to participate in a full two-sided market is difficult to see.

Retailers understand that most customers are simply not interested in responding to complex or steep price signals. They readily prefer certainty to price risk, and the economic theory that customers want to take risks and play in the market has not been borne out in practice.[4]

We note that the paper anticipates a long term transition path. For now, without the benefit of trial and evidence, the costs of implementing a full two-sided market in the medium-term would be unjustifiable and we do not consider there to be additional customer benefits compared to a voluntary two-sided market. The case has not been made for the transition path. The long term transition path should not be a screen for an absence of evidence of costs and benefits. We advocate a more evolutionary approach, noting that the costs of enabling technologies will likely fall over time, and that there will likely be other developments.

The paper contemplates the link with ahead markets. While a two-sided market facilitates the evolution of the NEM to take advantage of digitalisation, the ESB believe it is important that the system has the appropriate resources available to ensure a secure and reliable system. AEMO has identified several challenges that the system will face in maintaining system security in the next few years, particularly with issues such as inertia response, primary frequency control, voltage control and system strength. The aim of the high-level design of an internally consistent two-sided market is to harness the benefits of available technologies in such a way that promotes the long-term interests of consumers while also enabling AEMO to efficiently operate a secure and reliable power system. The paper considers that an ahead market could provide benefits to the two-sided market solution and anticipates a broader assessment of the merits of an ahead market for energy markets and consumer benefits in the next phase of work.

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[3] The paper highlights interaction with other reform processes, such as COGATI, network tariffs and ahead markets. The papers apparent contention is that each of these supports the other and are necessary for each to succeed. Network tariff reform in the medium term is unlikely to see cost reflective tariffs, and concomitant price signals, at a small consumer level. We believe that not all load, controllable or not, is required for the trial of a voluntary two sided market.

[4] The lack of penetration of time of use or demand pricing at a retail level for example is often cited by regulators as evidence of a lack of market evolution or innovation. Retailers on the other hand understand that non-price variables can completely overwhelm price influence in explaining customers' response patterns. It serves as a caution that regulators are not better placed than the market to determine what forms of innovation will persist.

The AEC believe that being able to forecast supply & demand (but not necessarily linking this to an ahead market) is helpful in ensuring system balance is maintained, but that it is unnecessary for a formal ahead market to do this. For example, predispatch is an existing indicator which provides the necessary market signals for generation and load to respond to anticipated conditions.

In addition to existing tools, the AEC would support the trial of a voluntary two-sided market. In our view the trial of a voluntary two sided market will keep the development costs low, will enable the freer evolution of such a market, and assist AEMO with the scheduling uncertainties therein. The timing of such a voluntary market should be guided by evidence and learning, capturing several years of DRM activity and VPP trials. This would dovetail the commencement of the voluntary two sided market into the 2025 timeframe.

A voluntary two-sided market can be implemented alongside cost effective measures to improve the transparency of other resources to assist AEMO with scheduling uncertainties. The voluntary two sided market option allows the integration of both dispatchable supply and controllable demand (though not all of either) in a way that allows the market to test and adjust itself as it tracks responses[5] to scheduling and dispatch. This approach is scaleable, and if proven allows for future evolution to a (potentially) full two sided market.

Any questions about our submission should be addressed to David Markham by email to david.markham@energycouncil.com.au or by telephone on (03) 9205 3107.

Yours sincerely,

David Markham
New Energy
Australian Energy Council

[5] Noting that the paper contemplates incentives rather than compliance with instructions.