

AEMC

Reliability Frameworks Review

Submitted: 18 May 2018 by Flow Power

To whom it may concern,

RE: AEMC Reliability Frameworks Review Directions Paper

Flow Power welcomes the opportunity to provide its input the Reliability Frameworks Review Directions Paper. Given its unique business model, demand management and demand response (DR), Flow Power has a high level of appreciation for the value drivers and current landscape of the NEM.

Based on the above, Flow Power makes the following introductory comments:

- Flow Power supports market-based solutions including DR as intended in the NEM design. Extensive experience proves that demand side response to price signals in the spot market already results in the best and most economical solutions for all parties
- DR is occurring under current arrangements and this is increasing, driven by the value being presented by the changing NEM
- One clear market failure is the lack of transparency in market signals through to users. As this is resolved there will an increase in users responding. This is also being resolved with advancing technology and transparency of the market value.
- Proposals that distort the signals driving DR risk inefficient outcomes and will inevitably increase costs to both consumers and the market.

Flow Power has closely reviewed the discussion and the presented options for DR in the Reliability Frameworks Review.

Flow Power believes that the three proposed solutions are unnecessary and are premised on assumptions that, according to its experience, are unfounded. Flow Power is of the view the market for DR will be driven by technology and consumer education, rather than the integration of a new mechanism or fund to drive change.

This is supported by its previous submissions to the AEMC on this Review that emphasised the following:

- The barriers to increased DR in the Australian power market have been overcome
- The market signals are already transparent and explicit. They must be passed through to users to drive DR and change.
- The most efficient outcome for both the market and consumers is for retailers to pass the signals through to their customers and empower them to respond using technology and education.

Investigation into elements of these above points may provide for increased understanding of DR.

There are three options put forward by the Review:

Option 1: Having an aggregator manage the value of DR

Option 2: Having an aggregator manage spot market responsibility for DR

Option 3: Providing a fund to incentivise retailers to develop DR.

Option 1 is considered the least disruptive but it has major issues, including baseline development that would need to be addressed. The separation of demand types (e.g responsive and not responsive) in Option 2 is unnecessary and could result in higher costs for retailers and consumers. Option 3 can be read as a subsidy when it is not needed and only adds cost to consumers.

In summary, the proposed arrangements do not offer any additional value to customers or the market and only stand to disrupt current market mechanisms.

Particular matters are further commented on below.

Level and type of wholesale demand response

There is no evidence of market failure within the Australian power market. DR is occurring and its only roadblock lies with the retailers that are failing to pass price signals onto customers. Flow Power does not consider the perceived lack of DR as accurate. Consequently, it does not agree with the belief that there is a case for additional mechanisms in the market.

Flow Power has taken steps to introduce the AEMC to other businesses that are facilitating market responsive DR and encouraging the growth of this market. Examples include retailers such as Amber Electric and Mojo Power, and customers like SA Water, who has established its own retail licence with All Water. The growth in consultants facilitating DR under a fee for service model also shows growing interest in the mechanism.

It should be noted that this model **has no cost** to the market.

Flow Power's dealings with an array of consumers shows that there is increasing awareness of how value can be obtained from DR, and the associated costs of DR options. It challenges the notion that confusion over the difference between efficient and non-intrusive price responsive demand management and involuntary load shedding is curtailing DR development

One Victorian Flow Power customer paid only 5c/kWh in March 2017 via leveraging a PPA through demand response.¹

¹ This customer signed a PPA with Flow Power. They actively responded in line with both the output of the Wind Farm and the spot market i.e. when the spot price rose and the wind was blowing, they reduced load and vice versa.

Importance of efficient market signals

Flow Power's consumer interactions demonstrates a growing need for new ways for Australian businesses to buy power, and the importance of market signals in delivering efficient outcomes to these businesses.

This supports the original design principles of the NEM emphasised as a "two sided" market where a clearing price is established by the intersection of generator offers and customer bids (providing for the clearing price to be set by customers some of the time and generators at other times).

The cost recovery for customers is at its best when the full market outcomes are passed on and made as simple as possible.

Example: Current contracting arrangements for businesses

Supply to large customers is hotly contested as evidenced by the very low retail margins in this market segment. Customers can choose to hedge their load physically (through DR) or financially (using contracts).

It is common for large customers to tender out their electricity supply requirements, frequently using third-party brokers to facilitate the competitive process.

There is no barrier to prevent these customers from stipulating DR elements in their tenders; however, few large customers appear interested in such products. Flow Power believes this is due to a lack of information and a false belief that the market is risky. Additionally, this is possibly exacerbated by short term contracting strategies. For example, large customers commonly seek 12 month or 24 month contracts and in some cases, even shorter contracts of six months. This was raised in the recent inquiry on default rates. Instead, Flow Power offers customers open ended contracts. Subsequently, Flow Power's churn rates are significantly below those of other retailers.

Taking into account the above statement, the impact of the current contracting structures should not be underestimated in the growth of DR. However, Flow Power does not see how any of the options put forward will resolve this because it is a matter of education and awareness.

Retailers are best placed to encourage demand response

Currently, retailers have access to the information and relationships required to drive DSR.

Retailers are also well placed to extend the service to smaller customers and to include network services as part of their energy services offering, without resorting to demand side aggregators. Flow Power has customers as small as 160MWh annual consumption, who actively respond to market signals. Customers are already having active conversations about price and efficiency. This can be seen in the rapid growth of retailers offering more flexible pricing structures.

This is a conversation about smarter power not always less power.

In summary, DR is a form of energy service offering that should be led by the customers and licensed retailers.

Perceived risk in exposure

The reality of all electricity contracting is that it is priced from the spot market. Contracts are set based on the predicted level of volatility and available supply but somewhere along the line, this message has not been translated to consumers. Additionally, consumers and the market are of the belief that the only alternative is that customers need to be spot market exposed. Flow Power has repeatedly proven that this is not true.

More than 50% of its customer base is hedged in some way but customers are still encouraged to respond during high market events to benefit from the upside of a swap or other hedge. Flow Power's PPAs also act this way. This gives the customer and the market a level of price certainty and still incentivises them to respond when the market needs it most.

This model drives demand response with **no cost** to the market, minimal exposure to the customer and certainty for the generator.

Infrastructure and technology

DR requires sharing of information and communications to facilitate response. This can be done simply (by phone), can be semi or fully automated.

Retailers may use in-house services or can outsource these services to external service providers. Customers can utilise the service of other consultants to alert them to changes but the market implications will sit with the retailer. Flow Power and other businesses like it have developed this capability and are providing services to customers.

Flow Power will roll out our kWatch® Intelligent Controller to more than 700 sites by the end of 2018

The ARENA Demand Response program demonstrates the rise of new technologies that will facilitate the growth in automation and control. Internationally, these technologies are standard and enable retailers to seamlessly manage load on behalf of customers in line with market signals. These technologies overcome many of the hurdles identified in the Review.

Other comments

Flow Power has considered the remainder of the review and notes the following:

- Any demand response should enable customers to also soak up low cost power during periods of high supply.
- Retailers would be able to provide a forecast of their load based on past outcomes. Flow Power has previously suggested that this could be used to manage the prudential required by AEMO and how this would help many smaller retailers.
- Ahead markets are unnecessary in the current market. Many services are available to users to provide forecasts on predicted market outcomes. Flow Power provides all customers with a week ahead view. However more transparency on generator bids would make these more accurate and in turn drive more response.
- Customers have the ability to firm up variable generation with demand response as can be seen from the example earlier in this submission.
- There is a role for a RERT style emergency reserve outside the market; however, given the expense is passed through to the customers, it should be used as a last resort. Flow Power believes that the increasing volume of market responsive load will minimise the need for this tool.

Conclusion

Flow Power is encouraged by the continued conversation about DR in the Australian power market. It is enthusiastic about its growing role in balancing supply and demand while keeping costs down for consumers.

It reiterates that the market already encourages DR, more information is always better, and all solutions must minimise cost to customers.

Flow Power look forward to more discussions with the AEMC on this topic. For further information please contact Liz Fletcher on liz.fletcher@flowpower.com.au

Yours sincerely,

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