



1 March 2024

Electricity Authority

By email to: OperationsConsult@ea.govt.nz

Tēnā koutou,

Consultation on peak electricity capacity issues

Thank you for the opportunity to provide feedback on the consultation paper regarding potential solutions for peak electricity capacity issues.

We support many of the topics raised in the paper, including:

- the proposed adjustments to enable more flexible use of Battery Energy Storage Systems (BESS);
- investigating the development of a 'super-peak' product. With increased intermittent generation, and growing peak demand, the need for super-peak products will continue to grow. A standardised product may help improve market liquidity.
- investigating the development of a standby ancillary service. This idea may have merit as a way to mitigate the risks of intermittent supply.

However, we do not consider that the Authority should use its scarce resource to pursue out-of-market solutions at this time. The three options considered by the Authority have considerable scope for harming market incentives at a time the market is ramping up its pipeline.

We consider that resource should instead be directed at the integrated solutions proposed by the Authority.

Market making for a standardised 'super-peak' product

Contact Energy does not support accelerating consideration of market making, as proposed at paragraph 6.3. Market making is a very expensive intervention, so requires significant evidence to justify. At this stage it is unknown if simply developing the product will be sufficient to ensure it is actively traded.

Once a standardised product is introduced we support a post-implementation review, which should consider if the product is meeting the intended need, and any other issues such as how frequently it is traded. Interventions, such as market making can then be considered against observable problems.

If market making is ultimately necessary, it is likely that it will need to be designed differently than market making for the ASX baseline futures market. Not all generators will have the same proportion of their physical assets that can support a super-peak product. A requirement placed on all major generators would create a significantly larger cost burden for those with less flexible portfolios, distorting the market. We therefore consider that the only viable option would be for commercial market making, which would also create greater transparency on the costs.

Demand Response Incentives

In our view there is a significant volume of un-tapped demand response in the New Zealand market. While this is starting to change for some parts of the market, we see a significant gap for small-medium sized commercial and industrial customers. This group is likely to represent one of the biggest markets for demand response by taking advantage of thermal inertia, flexibility in product inventory, flexibility in operating hours, etc.

Small-medium sized commercial and industrial customers almost unanimously demand fixed price variable volume (FPVV) contracts. This reflects their scale, risk tolerance and capacity to engage in the minutia of the electricity market. For FPVV contracts the Authority states in table 2 that the incentives for demand response are:

Consumers have no incentives to adjust demand.

But retailers have an incentive to pay for a demand response to minimise losses from buying at a high spot price and supplying at a lower contract price.

Payment for demand response would be some share of the difference between spot price and the fixed \$/kWh. (The consumer would save on the cost of the fixed \$/kWh).

The inducement would need to be big enough so that it plus avoided retail charges compensate consumers for foregone benefits from electricity use.

We agree that under the most common type of contract demanded by most commercial and industrial customers that the incentives for demand response sit with the retailer. In multiple submissions we have highlighted three interrelated problems that are holding this back.

- **Insufficient term** – to make demand side flexibility arrangements commercially viable they need a longer term (5 years +) than is common in retail contracts (1-3 years, except for the very largest customers like Tiwai or NZ Steel). Unlike residential flexibility, commercial and industrial flexibility requires bespoke arrangements to integrate with or upgrade a customer's existing control systems. That means there are significant set-up costs that are unique to each flexibility agreement. Furthermore, flexibility returns are also very volatile, taking advantage of peak market prices, whereas customers are seeking a consistent cash-flow. A longer term allows the retailer or flex trader to take the volatility risk, and be more certain of a sufficient return.

For this reason we consider flexibility traders to be more likely to support demand response than retailers on their own. Flex traders can bridge between multiple retail arrangements, allowing full retail competition, while also supporting longer term flexibility arrangements.

- However, a **lack of open flexibility markets** makes it hard for flexibility traders to reach commercial agreements. Currently a flexibility trader must establish an agreement with the customer's energy retailer to gain access to the value of reducing load. Commercial incentives make it unlikely that these agreements will result in an optimal outcome under current market settings.
- Even where an agreement can be reached with a retailer the **lack of standardisation** makes it hard to be certain of the long-term viability of setting up demand response. Each time a retail contract changes there will be a new set of demand response requirements suited to the new retailer's needs. These new requirements may or may not be supported by the bespoke demand response equipment installed at site.

The Authority's analysis has not yet engaged on these challenges, and has therefore not gotten to the heart of the problem.

We note that MDAG also considered this issue. They concluded that it is better to hope for retail market innovations that better incentivise consumer participation. They point to some minor tweaks that have been made to FPVV contracts to better incentivise consumers to adjust their consumption based on the needs of the market.¹

However, we are sceptical that sufficiently flexible retail arrangements will emerge at scale. In our experience small-medium sized New Zealand businesses have little appetite for moving away from FPVV contracts. Given the increased volatility of the electricity market we see no evidence that this is likely to change. It may be that New Zealand is unique in this regard due to the relatively small size of most of our businesses. Very few have the capacity to dedicate resource to managing their energy consumption.

We are also unaware of any market internationally that has seen a successful demand response market emerge without some supporting market mechanisms. Hoping for a response that has never happened anywhere else before, and is inconsistent with what consumers want seems to be a high-risk strategy.

We recommend that the Authority takes a wider look at options for improving demand response for commercial and industrial customers. It is clear to us that under current settings there is a significant lost opportunity. In the past we have advocated for a market-based demand response mechanism, similar to that implemented in Australia. The Authority continues to hold concerns with this approach. We disagree with the materiality of these concerns, but more importantly the underlying problems still persist. We would welcome a broader discussion on what potential options are available and the pros and cons vs the status quo.

Please contact me at brett.woods@contactenergy.co.nz if you wish to discuss further.

Ngā Mihi,



Brett Woods
Head of Regulatory and Government Relations
Contact Energy.

¹ [https://www.ea.govt.nz/documents/4335/Appendix_A2 - Final recommendations report.pdf](https://www.ea.govt.nz/documents/4335/Appendix_A2_-_Final_recommendations_report.pdf), pp175-177