



January 2024

Operations Consult

Electricity Authority

PO Box 10041

Wellington 6143

## **Consultation on Potential solutions for peak electricity capacity issues**

This submission responds to the Electricity Authority's consultation paper on peak capacity issues. It supports the overall direction suggested by the paper, that is to allow further market response to manage security of supply risk, and avoid short term interventions.

Firstly I am pleased to see how well the market has already responded to early peak capacity shortage issues and how effective the measures the Authority have already introduced have been in mitigating last winter's risk. Such market response and innovation is likely to continue if participants are confident of a stable regulatory environment.

In earlier consultations I had supported development of an additional new ancillary service to help manage peaks in the hope that this might help bring forth more demand flexibility (df), e.g. more opportunities for controlled hot water load to participate in the market. However I no longer believe this is necessary or desirable as:

- The other changes the Authority has already put in place has encouraged greater visibility of this resource;
- The market response to earlier winter peak issues has mitigated the immediate concerns; and
- The Authority have produced very good arguments as to why such short term changes are likely to be counter productive in the longer term.

My preference is to see the Authority focus its scarce resources on getting market signals right to encourage innovation in development of df. Two obvious areas are:

10 Hataitai Rd, Wellington 6021

Mobile +64 21 626 851

[www.NWCL.co.nz](http://www.NWCL.co.nz), Email: [Neil.Walbran@NWCL.co.nz](mailto:Neil.Walbran@NWCL.co.nz)

- How to encourage spot price exposed retail tariffs; and
- How to minimise barriers to df aggregation participation in the existing ancillary service markets.

Any work in these areas would be in addition to the proposed work on developing a “super-peak” hedge product. For clarity I also support development of such a hedge product, as I believe it will help development of df services. But wish to see more detail.

No part of this submission is confidential and I am happy for my submission in its entirety to be released publicly.

Regards

Neil Walbran

Managing Director

Neil Walbran Consulting Ltd

## Response to specific consultation questions

### Appendix B Format for submissions

<b>Submitter</b>	<b>Neil Walbran Consulting Ltd</b>
<b>Question</b>	<b>Comment</b>
<p>Q1: Do you agree with the principle that the winter capacity margin should be based on the trade-off between the cost of the hours of reserve or energy shortfall and the cost of the peaking generation needed to mitigate it? Do you have any other suggestions on factors the Authority should consider and why?</p>	<p>Agree. Ideally the tradeoff would be against the least cost option for avoiding shortfall. Whatever technology that might be.</p>
<p>Q2: Do you agree with our assessment of the incentives for demand response? If not, what is your view? Are there other criteria that the Authority should consider?</p>	<p>In general agree but there seems to be a missing piece of the puzzle wrt the ability of individual retail consumers ability to capture the financial benefits of their response. E.g. A lack of spot price exposed retail tariffs.</p>
<p>Q3: Other than financial incentives, what are the other barriers to entry for demand response participation in the wholesale market that you have identified?</p>	<p>For new entrant demand flexibility (df) aggregators trying to participate in the existing ancillary services markets compliance costs can be a barrier until scale is achieved. Particularly wrt receiving dispatch instructions. It isn't clear whether the dispatch notification tool applies to ancillary service df offers. If not it would be good to have this option for ancillary service offers.</p>
<p>Q4: Do you agree that the Authority should focus its resources on identifying and lowering barriers for BESS and demand side flexibility to participate in the wholesale and ancillary services markets? If so, where do you think the Authority should focus first?</p>	<p>Yes. As suggested above the cost of receiving dispatch instructions for ancillary service offers, such as via dispatch notification, would be a good start.</p>

<p>Q5: Do you agree that any solutions should satisfy these principles? If not, what is your view and why? Are there other principles that the Authority should consider?</p>	<p>Yes. But I wonder if the investigation should also include barriers to retailers providing spot price exposed tariffs. This seems a fairly obvious barrier to developing retail level df capability.</p>
<p>Q6: Do you agree that a standard product for financial 'super peak' hedges is required?</p>	<p>Yes, but it would be good to have more clarity on how a df aggregator could participate in offering this service and how they get paid. That wasn't clear to me from the paper.</p>
<p>Q7: What factors do you think we should consider in the design of such a product?</p>	<p>As above it would be a good test of the design to show how a df aggregator could participate and get paid. Including compliance costs.</p>
<p>Q8: Do you agree with our assessment of the risk for the medium to long term?</p>	<p>Yes.</p>
<p>Q9: Do you think it would be beneficial to create a new integrated standby ancillary service? What is your view and why?</p>	<p>No. It seems a lot of work and poor use of Authority resources for limited benefit. I would prefer to see the Authority focus on how df aggregators can access the existing ancillary service markets.</p>
<p>Q10: How should the costs for a standby ancillary service be allocated?</p>	<p>If it is implemented, then I would like to see costs allocated on a beneficiary pays basis, or (2nd choice) causer pays.</p>
<p>Q11: How should the residual requirement be set? Should it be an operational setting or dynamically calculated? If it is dynamically calculated, what factors should be considered in the calculation?</p>	<p>No view.</p>
<p>Q12: How should deficit (scarcity) standby residual be priced in relation to scarcity energy and scarcity reserve prices?</p>	<p>No view.</p>

<p>Q13: Do you agree with our assessment of the issues associated with procuring additional resource out of market? If not, what is your view and why?</p>	<p>Agree.</p>
<p>Q14: Do you think it would be beneficial to create an out-of-market tender for emergency demand response? If not, what is your view and why?</p>	<p>No. Don't like out of market arrangements, they are inefficient and distort the market and can do long term harm.</p>
<p>Q15: Do you think it would be beneficial to provide payments to resource providers for any uncleared generation and/or dispatchable demand? If not, what is your view and why?</p>	<p>No. Inefficient.</p>
<p>Q16: What do you consider to be an appropriate scaling factor to determine the price for residual and why?</p>	<p>No view.</p>
<p>Q17: What is your view on the factors the Authority should consider when valuing the costs associated with a standby ancillary service?</p>	<p>The associated costs should include the risk of inefficient market outcomes and potential long term damage of inefficient price signals on investment decisions.</p>
<p>Q18: What other options should be considered to better manage residual supply risk for winter 2024?</p>	<p>Any work the authority can do to encourage the development of spot price exposed retail tariffs will help both winter 2024 and future winters. Just signalling this is a priority will enhance market confidence to invest in df products and innovation.</p>
<p>Q19: Do you have information on any other international standby ancillary services and their positive impacts? If yes, please share your information.</p>	<p>No.</p>

