

16 December 2022



Electricity Authority Te Mana Hiko  
Emailed to: WholesaleConsultation@ea.govt.nz

Tēnā koutou,

## DRIVING EFFICIENT SOLUTIONS TO PROMOTE CONSUMER INTERESTS THROUGH WINTER 2023

1. Unison Networks Limited and Centralines Limited appreciate the opportunity to submit on the Electricity Authority's (Authority) consultation paper *Driving efficient solutions to promote consumer interests through winter 2023*.

### The problem

2. We acknowledge the Authority's recognition and response to the increasing incidences of residual shortfall and the associated risk to reliability and system security.
3. We agree with the overall analysis of the contributing factors:
  - a) increasing renewables;
  - b) decreasing fast start thermal generation;
  - c) demand growth associated with decarbonisation;
  - d) electrification; and
  - e) behavioural changes in response to more efficient and benefits-based transmission and distribution pricing.
4. Management of the issue to date has been Transpower, the System Operator, working with distributors to coordinate Hot Water Load control in real time to reduce demand. The impact of the issue on reliability for consumers and system security is now significant. We were closely involved, and our customers heavily impacted by, the events of August 9, 2021.
5. Transpower CEO Alison Andrew described the situation as unsustainable in a briefing to the CEO's forum and analogous to Network Operations Controllers having to land a jumbo jet, low on fuel, at Wellington Airport into a southerly wind, each cold winter night. We add that, in fact, there are also 29 Distribution Network Operations Controllers landing 29 domestic flights at provincial airports under the same conditions at the same time.
6. The modelling carried out by Transpower as the System Operator (SO) confirms the issue has become **urgent**. The status quo is not acceptable.

## Solutions

7. A pragmatic short-term solution is needed.
8. Wider packages that include medium to long-term measures should be carefully considered, in addition to (not instead of) urgent relief. Complex analysis of the interaction between any measures and effects in aggregate is required, and those measures cannot be prudently assessed and implemented in the short-term.
9. We believe a fit-for-purpose winter peak product is the short-term solution. This will incentivise and enable hot water and other resources to be visible, available, and committed hours in advance of identified periods of residual shortfalls. The System Operator will have certainty to confidently manage these challenging situations in a planned way, rather than sub-optimal reactive and adhoc measures adopted in real time.
10. We support the submission and associated proposal prepared under the oversight of the CEO's forum. In particular:
  - a) We agree that the key statutory objective at issue currently is reliability of supply in the long-term interest of consumers.
  - b) We believe Hot Water load control has and will continue to play an important role in ensuring reliability and system security. Specifically, we do not agree with the argument suggested in the consultation that "*An underlying issue may be poorly defined property rights for this demand-response, with consumers, networks and retailers having overlapping interests*". In our view, this issue has long been worked through with it being clear that:
    - i. the consumer 'owns' the property right and may contract/assign it to other parties. Commonly this is through adopting distributors' controlled price plans.
    - ii. Distributor-Retailer Agreements (DDAs) define the process and priority for exercising rights where these have been assigned to either party.
  - c) The issue is that there is no current market or operational solution that incentivises and enables visibility, availability, commitment, coordination and dispatch of Hot Water and other demand response in a planned manner, hours ahead of forecast residual shortfalls.
  - d) Solutions prioritised by the Authority must urgently address the needs addressed in (c) above for winter 2023.
  - e) The conceptual design of the winter peak product, developed under the oversight of the CEO's forum, addresses the urgent problem and is a fit-for-purpose urgent solution.

Ngā mihi



Jason Larkin

**GENERAL MANAGER COMMERCIAL AND CENTRALINES**

**Submitters: Unison Networks Limited and Centralines Limited**

Question	Comment
<p><b>Q1. Do you agree that operational coordination performance has become more challenging for the reasons indicated above? If not, what is your view and why?</b></p>	<p>Yes, but the paper doesn't fully recognise issue with lack of visibility and incentives for hot water and other forms of demand response and the risk these pose to reliability.</p>
<p><b>Q2. Do you agree that the factors in paragraphs 4.10 to 4.63 create information challenges or misaligned incentives, and that these make it hard to achieve optimal commitment actions? If not, what is your view and why?</b></p>	<p>No. These factors may all be relevant however other issues are more important such as the change in generation mix and no coordinated solution that can incentivise and coordinate a response to address periods of residual shortages identified hours in the future.</p>
<p><b>Q3. Do you agree that it is prudent to examine options to address information and incentive gaps identified above? If not, what is your view and why?</b></p>	<p>Yes, but the focus should be to find a working solution that will address the issue through ensuring firm response to residual shortages for winter 2023.</p>
<p><b>Q4. Do you agree with the proposed evaluation criteria? If not, what is your view and why? Are there other criteria that the Authority should consider?</b></p>	<p>No. If the Authority confines itself to these the risk of supply disruption in 2023 will not be adequately addressed.</p> <p>The proposed evaluation criteria do not include ensuring the level of physical reliability in 2023 is consistent with the long-term interest of (large and small) consumers.</p>
<p><b>Q5. What if any other options should be considered to better manage residual supply risk for Winter 2023?</b></p>	<p>We support the have provided a developed solution developed by the CEO's Forum that would address reliability in 2023 and provide a basis for developing an enduring solution subsequently.</p>
<p><b>Q6. Do you think it would be beneficial to publish the residual offer information used by the system operator when calculating Grid Warning and Emergency Notices? If not, what is your view and why?</b></p>	<p>Yes</p>
<p><b>Q7. Do you think it would be beneficial to provide sensitivity case spot price forecasts in forward schedules, as well as central forecasts? If not, what is your view and why?</b></p>	<p>Yes</p>
<p><b>Q8. Do you agree that cross-industry work on improving the quality of intermittent generation forecasts is unlikely to be available for Winter 2023? If not, what is your view and why?</b></p>	<p>No view. Our focus is on an immediate solution that will provide for adequate system reliability in 2023</p>
<p><b>Q9. Do you agree that the system operator should procure an external</b></p>	<p>No view. Our focus is on an immediate solution that will provide for adequate system reliability in 2023</p>

<p>wind forecast and ask participants to review their offers if there are large discrepancies between the forecast and offers? If not, what is your view and why?</p>	
<p><b>Q10. Do you agree that the availability and use of ‘discretionary’ demand control (such as ripple control not used for instantaneous reserves) should be clarified? If not, what is your view and why?</b></p>	<p>Yes, but believe an incentive is required to ensure this discretionary demand is visible, available and committed in advance.</p>
<p><b>Q11. Do you agree that work should be undertaken on a new integrated ancillary service for winter 2023 to help manage increased uncertainty in net demand? If not, what is your view and why?</b></p>	<p>We recommend proceeding with a multi hour winter peak product along the lines of that proposed by the CEO’s Forum.</p>
<p><b>Q12. Do you agree that selectively increasing ancillary service cover should be considered as an interim option for Winter 2023? If not, what is your view and why?</b></p>	<p>No. Existing Ancillary services are designed for specific purposes and not suitable to address the situation of residual shortfall.</p>
<p><b>Q13. If increased cover from an existing ancillary service at times is pursued further as an option for Winter 2023, what are your views on whether to utilise frequency keeping or instantaneous reserve, and why?</b></p>	<p>NA</p>
<p><b>Q14 Do you agree the option of requiring retailers to make compensation payments to customers affected by forced power cuts should not be explored for Winter 2023? If not, what is your view and why?</b></p>	<p>No. The issue of Residual shortfall is a security of supply issue associated with generation mix and wholesale market operation, not a retail issue.</p>
<p><b>Q15 Do you agree that reviewing the default pricing in the Code to apply in energy and reserve shortfalls should not be explored for Winter 2023? If not, what is your view and why?</b></p>	<p>No view.</p>
<p><b>Q16 Do you agree that an hours-ahead market should not be explored for possible adoption for Winter 2023? If not, what is your view and why?</b></p>	<p>No. We recommend proceeding with a multi hour winter peak product along the lines of that proposed by the CEO’s Forum.</p>
<p><b>Q17 Do you agree that mechanisms that procure additional resources outside of the spot market should not be explored further for Winter 2023? If not, what is your view and why?</b></p>	<p>Yes</p>

<p><b>Q18 Do you agree that options A, B, D, and E appear attractive and should be progressed further? If not, why not?</b></p>	<p>Yes, but given the urgency and seriousness of the situation the priority should be proceeding with a multi hour winter peak product along the lines of that proposed by the CEO's Forum.</p>
<p><b>Q19 Do you agree that options F and G should be assessed further to determine if they are likely to have net benefits? If not, why not?</b></p>	<p>No. We recommend proceeding with a multi hour winter peak product along the lines of that proposed by the CEO's Forum.</p>
<p><b>Q20 Do you agree that options C, H, I, J and K should not be progressed further for winter 2023? If not, why not?</b></p>	<p>Yes</p>
<p><b>Q21 What if any other matters should be considered when assessing options to better manage residual supply risk for Winter 2023?</b></p>	<p>The issue with lack of visibility and incentives, and coordination of hot water load controls and other forms of demand response which must be managed by the System Operator under emergency conditions and the risk this poses to reliability.</p>