3rd July 2025
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Taskforce 2D: Rewarding industrial demand flexibility

Mercury welcomes the opportunity to provide feedback to the Energy Competition Task Force (the Taskforce) on Initiative 2D *Rewarding industrial demand flexibility Issues and options paper* (the options paper). We acknowledge the Taskforce's focus on enhancing security of supply as the electricity system transitions to a more variable, renewable-dominated generation mix. We support efforts to unlock efficient sources of demand-side flexibility and appreciate the opportunity to engage early on the design and direction of potential new mechanisms.

Flexibility to be incorporated through market mechanisms

Creating a firm, flexible demand side response that aligns with system needs requires market participants to aggregate resources and deploy them optimally based on clear wholesale and network price signals (value stacking).[1] In *Understanding the key priorities for the New Zealand electricity industry*, Sapere notes that while individual flexible loads may be energy-limited, they are widely available across the system, and their value can be unlocked through aggregation and clear price signals. [2] In Transpower's latest Security of Supply Assessment 2025 (SOSA 2025) they note that demand response could be potentially be put in place quickly, making it a meaningful short-term option; it also typically does not need to be consented and may not require material capital investment.[3]

We support the development of standardised demand response flexibility products as they will make it easier to participate in the transition. The options paper outlines a desire to strengthen system security through more predictable and reliable intraday industrial demand flexibility. The MW of additional winter intraday system flex is around 110MW to 170MW as identified in the options paper. Though modest in absolute terms, it is systemically valuable and may increase over time with newer technologies and market participants.

In our view, demand side flexibility is a valuable tool and should be integrated through existing market mechanisms to the greatest extent possible as a priority action to ensure reliable, affordable supply of electricity.

As we noted in our February 2025 submission to the Taskforce's initiatives 2A-C

> *"As New Zealand's energy mix becomes increasingly renewable over the next few years, increasing flexibility in the system will be paramount for when it does not rain, the wind does not blow, or the sun does not shine.* ***Ultimately, all types of flexibility across all types of timeframes will be needed to ensure security of supply during seasonal changes and daily peaks, unlocking significant savings to consumers and the system as a whole****."*[4]

The Taskforce is proposing to have in place by Winter 2026:

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[1] Sapere, Understanding the key priorities for the New Zealand electricity industry 2025, available from https://srgexpert.com/wp-content/uploads/2025/02/Understanding-the-key-priorities-for-the-New-Zealand-electricity-industry-Addendum-to-main-summary-report.-February-2025.pdf
[2] Ibid.
[3] Transpower, Security of Supply Assessment 2025, 30 June 2025.
[4] Mercury submission available from https://www.ea.govt.nz/documents/6807/R_Mercury_2A2B2C_submission_2025.pdf

- Immediate action 1: Emergency Reserve Scheme (ERS) – a standby mechanism to call on industrial curtailment during supply stress. It is emergency-only, pay-on-activation, and explicitly non-capacity market.
- Immediate action 2: Standardised industrial demand flexibility hedge product – a market traded contract (like a "super-peak" hedge) enabling retailers to hedge scarcity events by securing access to industrial demand curtailment.

We address the standardised industrial demand flexibility hedge proposal first, followed by feedback on the ERS. We acknowledge further rounds of consultations are expected and the Taskforce is seeking preliminary views.

Broad support for market-based, price-driven demand-side hedge products to reward flexibility

The Taskforce proposal to develop "*a standardised industrial demand flexibility product similar to that of the super-peak flexibility product [through a] industry-led co-design group developing the product with support from the Authority*"[5] aligns with the December 2023 Market Development Advisory Group (MDAG) recommendation to establish a suite of standardised flexibility products. We also note that a demand side product was identified as a priority for development by the Flexibility Product Co-design Group that was established by the Authority late last year

There is value in exploring new tools to unlock demand-side flexibility. We encourage the Taskforce to consider a set of design principles that will ensure that any product designed is traded voluntarily and is targeted clearly at defined system needs (e.g specific winter mornings). It would be helpful to understand how a demand-side, intraday, hedge product would interact with existing bilateral demand response contracts and spot market exposure. There may be scenarios where participants receive both explicit payments and benefits from avoided wholesale prices or contract positions. While this may be intentional, if it is not, then it should be addressed through transparent design principles. In our view, mechanisms that reward industrial demand flexibility should be designed to avoid unintended overcompensation for the same curtailment action.

We suggest the design work is undertaken by the existing Co-design Group as it has practical experience in developing products to market. Leveraging this group would provide continuity, enable efficient progression, and ensure any new product design is grounded in established, collaborative processes.

We agree with the Taskforce's assessment that set and forget approach to activating demand flexibility is not appropriate. As such, we are encouraged that the Taskforce envisions a future where ex-post reviews are undertaken to evaluate certain regulatory decisions.

Clarifying the purpose and role of the Emergency Reserve Scheme

While we acknowledge the Taskforce's intent to encourage industrial electricity use to help maintain balance in the power system to manage peaks, the proposal reflects a broader challenge of how to preserve efficient market signals, while also ensuring demand-side resources are activated in a timely and orderly way. It would be helpful to further clarify (1) the specific structural issue the proposed Emergency Response Scheme (ERS) is designed to address and (2) how any ERS would align with the market so as to minimise unintended consequences, e.g. undermining emerging bilateral tools.

The Electricity Authority's own 2024 Winter Review[6] indicates that industrial demand response (e.g. Tiwai curtailment) effectively reduced demand by ~205 MW and achieved meaningful price relief. This provides recent, real-world evidence that bilaterally agreed demand response both at the seasonal and intraday level are beginning to be established. If ERS is positioned as a backstop, it might influence market behaviour and therefore it would be

[5] Energy Competition Task Force, Rewarding industrial demand flexibility, Issues and options paper. 2025. Pg. 28
[6] Electricity Authority, Review of winter 2024, 2025. Available from: https://www.ea.govt.nz/documents/7159/Review_of_winter_2024_jnOSQfc.pdf

appropriate to have robust evidence and a sound cost-benefit analysis rather than assumptions based on perceived uptake. A limited uptake of industrial demand response may reflect rational commercial choices under current pricing conditions, not a structural failure requiring explicit payments. It may also reflect current challenges with scarcity prices being fettered and so diminishing signals provided to customers to curtail demand[7].

It is not yet evident how an ERS would be integrated with dispatch and pricing, the relationship between it and any consumer conversation campaigns that could (or may) occur concurrently, how it would be valued against energy and reserves markets, including its fit in the merit order of curtailment; nor how it would affect the existing investment environment more broadly. This makes the proposal difficult to evaluate beyond the concern that it appears to conflict with market principles to receive direct payments and avoid spot exposure for the same curtailment action. To put it simply, an ERS is not without risk.

We consider that the level of urgency signalled by the Taskforce may not align with actual system conditions. Transpower highlights in SOSA 2025, in the short term (1-2 years), a focus on dry year risk, and that this is addressed through longer-duration demand response, amongst other things.[8] If the Taskforce wishes to explore an ERS option further, it should not move with haste.

Instead, we recommend the Taskforce hold a series of workshops to collaboratively work through the proposals. Market participants would be able to assess whether the benefits of ERS in managing short-term capacity stress outweigh the risk of long-term investment distortion. An open and collaborative approach would also help ensure that, if developed, the mechanism is appropriately targeted, avoids unintended incentives or significant distortions, and ultimately exists to supports a secure and cost-effective electricity supply for the long-term benefit of consumers.

If you have any questions about this submission, please do not hesitate to contact me.

Yours sincerely,
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[7] Sapere, Understanding the key priorities for the New Zealand electricity industry 2025, available from https://srgexpert.com/wp-content/uploads/2025/02/Understanding-the-key-priorities-for-the-New-Zealand-electricity-industry-Addendum-to-main-summary-report.-February-2025.pdf
[8] Transpower, Security of Supply Assessment 2025.