



The Electricity Authority
Wellington
OperationsConsult@ea.govt.nz

Consultation Paper – potential solutions for peak electricity capacity issues

Thank you for the opportunity to comment on this paper.

Winter 2023 confirmed supply is likely to be tight for winter 2024 and we commend the Authority and the System Operator for taking pre-emptive actions.

NZ Steel has been involved in the preparation of the Major Electricity User Group (MEUG) submission and we commend this to you.

The consultation paper recognises longer term challenges as the New Zealand electricity system continues to expand renewable generation as a key part of decarbonising the economy. Much of the focus in the consultation paper is on immediate steps with winter 2024 and the medium term, and we will leave the detail for others to comment on. Page 4 of the paper correctly infers some of the measures that may be required are 'sticking plasters' until market participants respond.

Many of the measures being proposed add complexity to an already complex environment which few participants, particularly on the demand side, are resourced to deal with. Further complexity brings further cost to participants, and needs to be factored-in by the Authority to the already strained affordability equation in New Zealand.

There are wider aspects NZ Steel wishes to highlight. Some of these may have an impact on the actions the authority wishes to implement now, and others are important to providing a solid foundation to the electricity system of the future.

- It is important for the Authority to differentiate and articulate actions required to get through the next winter (or three), and actions with longer term impact. In this regard the Authority has previously espoused that New Zealand does not currently have a capacity

issue, but rather the availability of that capacity and fuel at the required time. It is made clear on page 3 that “The focus of this consultation paper is the management of capacity issues”.

- Expected growth – energy and peak - is an important part of the driver for improved tools for managing the electricity system. The tools to be employed and investment required to meet this expected demand, increase complexity and/or cost, all of which falls on the consumer. We suggest the Authority re-test the extent and timing that electrification is likely to occur. The current market dynamics and short/medium term pricing are not conducive to large investments in long-lived assets by the demand-side and this will impact the forecasts for increased electricity.
- Whilst we are aware of the commentary in 3.23 to 3.35, we consider incentives for meaningful demand response are lacking. The focus is short-term, but the electricity industry requires a long-term lens. The new TPM transmission pricing, at least in the short / medium term, is largely all-you-can eat for a fixed price. The wholesale spot price signal only has relevance in the immediate sense (as per 3.34), and can change significantly at the next dispatch. There is difficulty and cost, particularly for large consumers, to reactively adjust load in a business efficient way. To date we struggle with RTP and DD as to how these can practically assist as demand side management tools. A strong financial incentive is required to achieve meaningful demand side participation.
- Section 3.27 is of particular importance. We quote; “By far the largest contribution to the total economic benefit from an uptake of demand-response will be in the **offsetting of new transmission, distribution and generation investment** – some \$5.9 billion. The next largest contribution is estimated to be from the **offsetting of the thermal peaking plant**, \$0.347 billion.” (bolding added).
- The consultation paper fails to recognise the key issue ie lack of an appropriate signal to encourage improved load factor. Short-term price signals have a place in managing issues of the time, but as with most high-cost, long-lived infrastructure assets, the best outcome is from ‘sweating’ the assets smoothing demand. In a market-based system this is achieved by long-term economic signals discouraging peaks in demand on the system. In this regard 4.1 and 4.2 continue to focus on the short-term, when it is long-term measures that will reduce the incidence of short-term issues. This then places a different lens on the tools required to deal with infrequent occurrences.
- Top of page 3 notes the “...sharp increase in peak demand over the last two years.”, but fails to include in this paper an analysis of the why. One of the key factors is the change in the TPM and removal of RCPD. Tesla forecasting have stated the Auckland Region peak has increased by 7% due to removal of the RCPD signal. We recommend the Authority look closer at what is actually driving the increase in peaks. In particular the decision to remove the RCPD price signal, and Transpower declining the option to implement a transitional congestion charge.
- A direct coincidental peak charging mechanism that is passed through to end consumers will achieve a number of the objectives set out in the paper, and in a more straight-forward manner. Importantly a coincidental peak charging mechanism provides

the long-term incentive to increase utilisation of existing assets and extend the time for new investment to meet demand at peak times.

We will be happy to expand on any of the points made and would welcome an opportunity to discuss our proposals.



Alan Eyes | Energy Manager – Policy & Industry
New Zealand Steel

T +64 9 375 8393 | **M** +64 21 870 629

E Alan.Eyes@bluescopesteel.com | **W** www.nzsteel.co.nz

A 131 Mission Bush Road, Glenbrook, Private Bag 92121, Auckland 1142