

## The Electricity Authority

PO Box 10041  
Wellington 6143

14 April 2025

To whom it may concern,

### **Expiry of Urgent Code regarding market-making under high stress conditions**

Thank you for the opportunity to make a submission in regards to the proposal to let the current urgent code change related to market-making lapse and to provide initial views on the necessary changes to the scheme going forward.

Bold Trading and its subsidiary emhTrade Markets are deeply experienced participants in the market for New Zealand electricity price risk. The companies provided the expertise and operational capability to Bold Market Making New Zealand Ltd, which fulfilled the first contract under the commercial market-making scheme.

We provide a brief submission covering both the proposal to allow the urgent code change to lapse and to provide input into what we consider to be essential changes to the current market-making settings.

### **Certainty and stability are paramount**

As the Authority notes in the paper, the market-making scheme has been designed over many years to ensure that market-making, and therefore liquidity, will be robust and reliable in times of market-stress. This is critical to ensure participation in the market at other times due to the fact that participants will measure their risk by what happens in the worst-case scenarios.

### **The Authority has scored an own goal**

Whilst there was plenty of time in the lead-up to last year's event for the Authority to conduct analysis and plan an appropriate response, this didn't happen until, in the Authority's opinion, the scheme's collapse was imminent<sup>1</sup> the day before the guidance was issued.

It is absurd that the Authority has for many years held the view that market-making is critical in times of market stress only to take knee-jerk actions to halt it with no analysis or consultation during a period of market stress, and to then once again state that market-making is "*especially important during times of market stress, when prices in the spot and futures market are increasing rapidly*"<sup>2</sup>.

Whilst we agree with the conclusion that market-makers continuing to provide liquidity without widening spreads is in the best interest of consumers and the wider economy (which we stated during informal submissions on the urgent code change). Revoking the code change at this point

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<sup>1</sup> The Authority's response to an OIA request showed the analysis was limited to counting the number of exemptions that participants had taken. This analysis was apparently undertaken the morning prior to making the change to enforcement that resulted in widened spreads and reduced volumes.  
[https://www.ea.govt.nz/documents/5837/19\\_September\\_2024.pdf](https://www.ea.govt.nz/documents/5837/19_September_2024.pdf)

<sup>2</sup> The Authority makes at least four references to the importance of reliable market-making in times of market stress in the consultation paper.

is likely to provide further uncertainty to the market.

If the \$500/5% trigger is made permanent, the trigger price should be subject to 3-6 monthly review. The review process need not be overly complex, but rather (similar to the stress test levels) it should be dynamically aligned with technology and fuel prices such that it remains reflective of a price level which would indicate a stressed market.

### **Authority decisions are the primary driver of reliability.**

The greatest risk to reliable market-making during the next period of market stress is likely to be the actions of the Authority rather than participants. A circuit breaker such as that in place under the urgent code change is likely to provide the Authority with enough time to undertake thorough analysis before making decisions in response to lobbying.

The Authority now states that its *“primary objective in considering the urgent Code amendment is to consider reliability. To meet the goals of a robust forward price curve and available risk management tools, the Authority needs reliable market making services at all times, particularly in times of high stress”*.

The market needs reassurance from the Authority that appropriate controls and decision making processes have been put in place since August to ensure that the Code can be relied on.

If the Authority is going to use discretion not to enforce the Code in times of market stress, it is quite irrelevant what the Code stipulates. The Code, with or without the circuit breaker, will provide this reliability, but only if the Authority chooses to enforce it.

### **Procurement decisions directly impact reliability**

If the primary goal is to ensure the provision of reliable market-making services at all times, it is unclear why the Authority (at a cost to consumers) has continued to utilise the services of a commercial market-maker that was unable or unwilling to provide the services to the level that is required of the regulated market-makers during times of market stress.

The commercial market-maker (and indeed some regulated market-makers) relied heavily in August on a ‘regulatory put’ to save them from commercial losses. It is unconscionable, after they failed to provide services for 6 consecutive days, and arguably provided the catalyst for the Authority’s concerns about ‘cascade failure’, that the Authority continues to procure services from the current commercial market-maker. Whilst their performance may have resumed since August, enabling them to collect revenue when the going is good, market participants and consumers appear to continue to wear the risk that they won’t perform during the next period of stress.

The Authority ought to reflect on and review the criteria and procurement process that led to contracting with a provider that appears to have been incapable of managing electricity price risk without help from the regulator; help which came at significant cost to other market participants and ultimately, consumers.

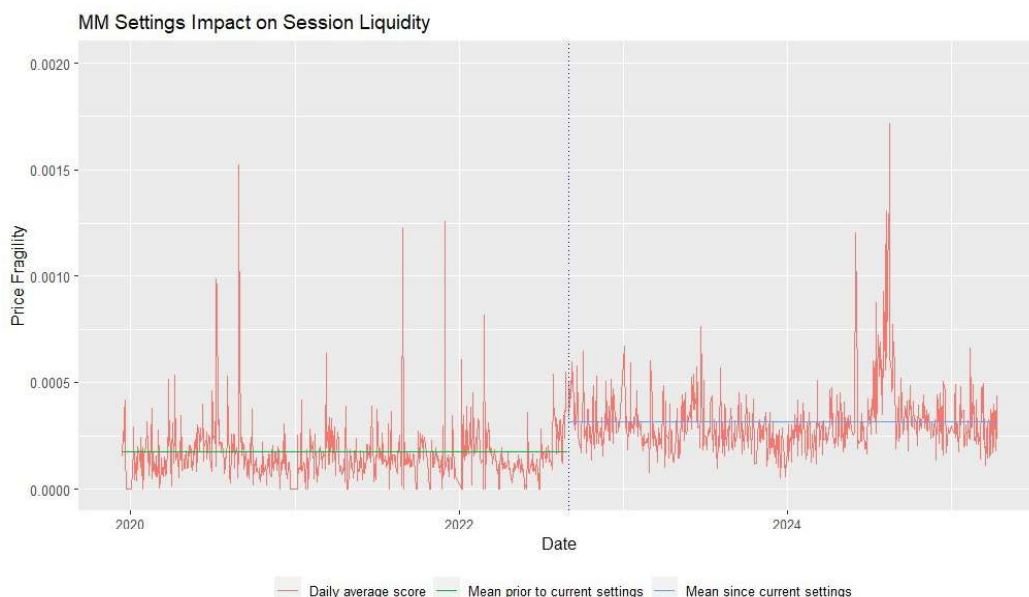
### **Current settings have empirically reduced liquidity**

As the Authority’s analysis shows, liquidity has reduced since the inception of the commercial

market-making scheme<sup>3</sup>. Whilst the metric presented in the consultation allows this conclusion to be easily drawn, it drastically understates the impact that the settings have had on liquidity within the market-making session.

The Amihub illiquidity ratio that the Authority presents uses closing price data. This is a potentially useful metric, but it is generally not possible for parties to reliably transact based on closing prices. For the forward curve to provide economic benefit it must be transactable, and any party that wishes to transact NZ electricity futures will generally be trying to do so during the market-making session (potentially via a broker).

Since the settings were introduced in late 2022, the volatility within any given market-making session has increased dramatically. There have been much larger price swings (as a percentage), happening as a result of lower traded volumes.



We conducted a similar analysis<sup>4</sup> using data from within the market-making sessions. In the chart above we are effectively looking at the movement within the sessions, normalised for the volume traded. It clearly shows a step change towards worsened liquidity since the current settings were implemented.

This matters when it comes to the utilisation of the forward curve. If participants are attempting to utilise the market, contracts need to be available to do so, and price needs to be static enough (on a second by second basis) for them to have some degree of comfort that they reflect a fair, competitively determined and efficient level.

We can see from the chart below that the trading during the market-making sessions has become far less orderly since the current settings were implemented, and that this is true even when there is a lack of any market stress.

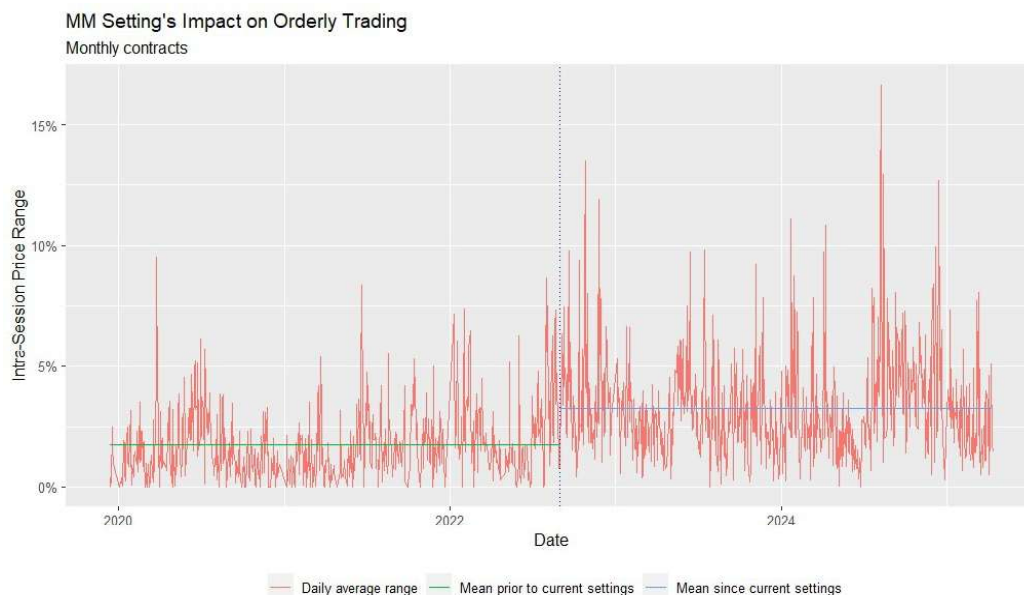
It is one thing to say that settlement prices are moving more relative to the quantity traded, there are situations where it may be entirely efficient for a market to move to a new level without

<sup>3</sup> Para 9.10 of the consultation paper (and fig4) states that liquidity fell away again in late 2022 (when the current settings were introduced)

<sup>4</sup> This metric of price fragility is the ratio of the absolute log of (max price/min price) to the traded volume (all within a single session for each contract, then arithmetically averaged by day across contracts, baseload contracts only)

trading as new information becomes available and the market *gaps* to the new price.

However, it is quite another to see that contracts are frequently displaying movements of 5-10% between *traded* prices that are occurring *within* a 30-minute market-making window. Again, this step-change is observed regardless of whether the market is in a particularly tight spot. We show the monthly contracts below, but the issue is similar in the quarterly contracts (albeit not quite as stark).



## Refresh implementation to blame

As we warned in our submission in 2022<sup>5</sup>, the structure of the refresh, combined with the 'total traded' volume threshold:

- Increases the effective spread on volume to > 6% vs the prior settings (because prices will move after the first tranche transacts).
- Reduces the available volume to non-market-maker participants (and to market-makers trying to adjust their positions). This occurs because a market-maker that buys and sells but is net-flat is deemed to have fulfilled their obligation.

The fact that the obligation can be fulfilled without providing any net volume heavily incentivises market-makers to *scratch* (instantly trade out of) positions that they are given. As this activity then fulfils their obligation, the market loses both the refresh volume that they would have provided *and* the volume that they are scratching into (usually provided by another market-maker). Thus, if a 3rd party procures 1.2MW of a contract, this often consumes 3.6MW of the total 12MW that market-makers are, in theory, providing.

In fact this effect often creates a feedback loop where the next market-maker also scratches and so on, such that the initial 1.2MW transaction has significantly moved the price, and allowed multiple market-makers to fulfil their obligations, even though no further risk has been transferred to participants.

<sup>5</sup> [https://www.ea.govt.nz/documents/1327/Emh\\_Trade - Commercial Market Making Code amendment - submission.pdf](https://www.ea.govt.nz/documents/1327/Emh_Trade_-_Commercial_Market_Making_Code_amendment_-_submission.pdf)

This combined volume reduction and price volatility makes it challenging for any participant to undertake any meaningful hedging activity during the market-making session.

### **Easily resolved with maker/taker approach**

It is critical that the Authority resolve this issue in the next iteration of market-making settings. A simple and effective approach would be to maintain all of the current settings but use a maker/taker approach with regard to volume obligations.

Under such an approach, the same 'total traded' threshold will be used, but only volume where the market-maker is not the aggressor will count towards their obligation. This will be simple to implement as all common tools used by market participants have this flag on fill notifications and it is clear in the tick data provided to the Authority for monitoring purposes (ie if a market-maker order is filled it is clear whether that was in the market *providing* liquidity or aggressed another order to *take* liquidity).

The approach is used extensively in global markets in fee calculations and liquidity support and market-making schemes. It makes perfect sense in that the principle and purpose of our current scheme is that 12MW of liquidity is provided (as it has been voluntarily for many years). However, under the current settings we effectively have 12MW of liquidity 'taken or provided', which results in the lower liquidity and higher volatility that is observed in the data.

This change will still allow market-makers to scratch out of fills, but the incentive to do so will be far lower given that they will still be required to quote afterward. There will be direct benefits from better price discovery after any initial flurry of buying or selling, the lack of which is currently driving a lack of liquidity and high volatility within the sessions.

Furthermore, because an order needs to be on exchange in order to count towards the obligation (rather than being an aggressor order) there will be a strong incentive for market-makers to *frame* the market in the first few minutes of the session (even if at slightly wider spreads). Again, this will lead to a gentler open and improved price discovery.

We agree with the reasons for implementing the refresh, particularly to avoid early collisions and no follow up price discovery, but the loss of liquidity and increased volatility that has resulted from the way the volume is calculated must be resolved.

Broadly speaking, we don't see any other settings that ought to be changed at this stage. Consistency in settings will provide greater certainty in cost estimates for parties that are looking to provide market-making services in any future procurement process.

No part of this submission is confidential, please don't hesitate to contact us if you have any questions.

Yours Faithfully,



Stuart Innes,  
CEO  
emhTrade Markets Ltd



Georgina Herb,  
CEO and Co-founder  
Bold Trading Pty Ltd