CAPITAL STRATEGIC ADVISORS

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Thoughts on the stress test regime

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About Capital Strategic Advisors (CSA)

Based in the capital city of New Zealand, CSA provides strategic policy advice to government and private sector clients. CSA has expertise in regulatory and tax policy, market design, pricing theory and practice, competition and infrastructure issues, and the implications of innovation and technology change for regulatory design, productivity, and economic growth.

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Summary

The stress test regime plays a crucial role in the NZ electricity market because it addresses incentives for opportunistic behaviour. The re-emergence of this behaviour over the winter of 2024 suggests the regime needs to be strengthened. Given the elevated risk of further energy shortages, the regime should be reviewed urgently.

For it to work well, the stress test requirements must be credible, and the results must be made available to ministers and media commentators in a form they can use to inform their audience. The latter is crucial for the regime's effectiveness.

The Authority's Market Development Advisory Group (MDAG) recommended enhancements to the regime in its report on price discovery in a renewables-based electricity system. Their proposal to extend the horizon of the stress tests should be impactful and easy to implement.

In reviewing the stress test results for this note, I was surprised that a material change to the spot price parameter in 2021 appears to have had no discernible impact on test results. This has led me to wonder whether participants are undertaking the test correctly. I propose an approach to checking the validity of the results.

As they are currently presented, I doubt anyone other than industry specialists understand the stress test results, reducing the regime's effectiveness. I propose several approaches the Authority could take to improve how it presents and promotes stress test results without disclosing confidential information.

Two other initiatives for reducing opportunistic behaviour are worth considering. The first involves using the stress test to obtain information about hedge offers rejected by materially under-hedged parties. The Authority recently reported its findings about rejected hedge offers for three businesses; however, the information was unavailable when it was most needed. I have proposed amending the stress test regime to collect this information in a targeted and timely manner.

The second initiative involves the Authority quantifying the 'swings and roundabouts' with an under-hedging strategy and using that analysis to encourage more critical questioning of businesses about why they did not hedge.

Given the above issues, the Authority should urgently review the regime. It could do this by adopting a two-phased approach. The first stage would focus on matters the Authority can complete before winter 2025, as they do not require further information from participants and can be implemented under current Code provisions. The second phase would take considerably longer. It should be undertaken in parallel with the first phase to ensure completion before winter 2026.

1. Introduction

Tight supply and high spot electricity prices over winter 2024 were accompanied by intense lobbying of ministers to bail out spot market purchasers who had not adequately hedged for the period. These parties and others called for ad hoc intervention in the wholesale electricity market.

Opportunistic lobbying was a regular feature of the electricity market before the stress test regime was introduced in 2011. However, since then, the regime successfully discouraged that activity during tight supply events, such as in 2012, 2018, and 2019 and the less severe dry episodes in 2013 and 2015. The re-emergence of opportunistic lobbying during winter 2024 suggests reform is urgently needed.

The Market Development Advisory Group (MDAG) has made valuable recommendations for enhancing the regime; however, I have taken a broader approach. MDAG largely confined its attention to the codified features of the regime and did not review historical stress test results or consider how the Authority proactively promotes the regime to achieve its purpose. They also did not have the benefit of the winter 2024 experience.

2. The original rationale for the stress test regime

The design of the NZ electricity market allows spot market purchasers total freedom to choose their risk exposure and how they respond to tight supply episodes. The stress test regime is a crucial complement to these arrangements because it addresses incentives for opportunistic behaviour.

The consultation paper introducing the regime in 2011 referred to past experiences during periods of tight supply and noted that policymakers come under intense pressure to make ad-hoc changes to wholesale market arrangements.[1] This increases the risk of regulatory failure. The stress test regime was adopted to improve the time consistency of the market design by reducing the credibility of opportunistic lobbying, often conducted through the media and directly to politicians.

The consultation paper noted that it can be very difficult for market participants to publicly accept responsibility for the risks they took, and they have strong commercial incentives to scapegoat the electricity market when risks materialise. For example, faced with the survival of their own business, parties have nothing to lose and much to gain from publicly blaming the electricity market and calling for interventions to save their business.

The paper also noted that ministers are unlikely to fully know the circumstances facing spot market purchasers and the real reasons for their risk management choices. This is partly because, to maximise their chances of a bailout, under-hedged firms must present their business as viable long-term.

Further, leaving businesses to face the consequences of their risk management choices carries significant political risk for ministers. To resist calls for intervention, ministers must be able to refer to credible information in their communications with the media and the electorate.

A key purpose of the stress test regime, therefore, was to arm the Authority with the information it needed to deflect opportunistic claims and assure ministers and media commentators that spot market purchasers knew the risks they were taking ahead of episodes of market stress.[2] For this to work well,

[1] Electricity Authority (2011) *Consultation paper: Proposed refinements to the stress testing Code amendments*. Electricity Authority Te Mana Hiko.
[2] Electricity Authority (2011, para 2.3.8).

the stress test requirements must be credible, and the results must be made available to ministers and the media in a form they can understand.

Consistent with this, I made the following comments in a speech to the World Forum of Energy Regulators in Istanbul, Turkey, in May 2015:

> *"The stress test regime makes it patently clear to the media and politicians that spot market purchasers know the risks they are taking if they decide not to hedge their exposure to the spot market. This regime has undermined the credibility of parties lobbying the media and politicians for ad-hoc interventions when hydro conditions become tight."*[3]

3. Promotion of the regime before and during winter 2024

As the Authority's chief executive from 2010-18, I usually outlined the stress test regime and its rationale to new Ministers of Energy and Resources. I emphasised that we would inform them and journalists so they could question the risky choices made by parties lobbying for intervention. I also recall telling a Parliament select committee in 2011 or 2012 that the Authority would use the stress test regime to assist ministers and media commentators in assessing the credibility of lobbying behaviour.

I have been unable to find similar statements by the Authority immediately before and during the winter 2024 event. The Authority's 2023 Briefing to the Incoming Minister does not mention the regime, and neither do any of the Authority's four-monthly reports to the Minister on its website. I have also not found any media statements from the Authority advising journalists of the regime and results. The Authority may have provided advice informally; however, no media reports mentioned the regime until the event was essentially over.

The central role of the stress test regime means a dedicated media statement would have been appropriate.[4] But there were other opportunities to highlight the regime. For example, on 8 August 2024, the Authority published an 'eye on electricity' note about spot price volatility and did not mention the regime. On 9 August, the Authority announced its actions regarding recent high spot prices, which would have been an excellent opportunity to highlight the credibility role of the stress test regime. Further, on 13 August, the Authority announced the stress test scenarios for the December quarter and once again did not take the opportunity to highlight the regime's credibility role.[5]

This contrasts with the Minister of Energy's Government Policy Statement (GPS) issued on 11 October 2024, which emphasised that market participants are responsible for having risk management arrangements appropriate to their wholesale market risk position. It also stated that neither the Government, the Electricity Authority, nor the System Operator will protect market participants from failing to manage their risks.[6]

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[3] Hansen, C. (2015) 'Speaking notes for WFER presentation 26 May 2015'. *World Forum of Energy Regulators*, 26 May. Available at: https://www.ea.govt.nz/assets/dms-assets/19/19397Speaking-notes-for-WFER-presentation-26-May-2015.pdf.

[4] Media statements were unnecessary for other dry episodes since 2011 as opportunistic lobbying did not occur.

[5] There were also opportunities to mention the regime when the Energy Competition Task Force was announced on 28 August and when further details were provided on 9 September. However, both opportunities would have been "better late than never" situations.

[6] Paragraphs 20 and 21 of the GPS, available at https://www.ea.govt.nz/news/press-release/authority-welcomes-government-policy-statement-on-electricity/.

4. MDAG's recommendations to enhance the stress test regime

The GPS also signalled support for enhanced stress test arrangements recommended by the Market Development Advisory Group (MDAG).[7] I agree with many of MDAG's recommendations for enhancing the regime.

4.1 Extending the stress test horizon is likely to be most impactful

MDAG recommends extending the stress test horizon to allow the Authority to require tests for up to three years.[8] To keep the requirements simple, MDAG suggests participants be required to report the percentage of their projected annual purchase volumes hedged by contracts and physical resources.

The simplified approach is not a stress test as it does not require participants to measure their financial exposure to stress scenarios. In principle, it could provide a meaningful statistic, broadly similar to the quarter-ahead cover ratio in the current regime, however, this will depend on the details of how the hedging value of physical resources are measured and aggregated. Depending on those details, compliance costs could be far higher than MDAG envisaged.

MDAG's rationale for their recommendation is that longer-term risks are expected to become much more relevant in a system with significant demand growth and a higher share of supply from renewable sources. They believe the additional requirement "…would be a useful prompt to ensure participants are considering the forward horizon." [9] In my view, the additional information will also enable the Authority to publish statistics about forward hedge cover, which it can use to deflect opportunistic claims and better inform ministers. It would also inform participants about their forward-hedging activity relative to others.

4.2 Other recommendations may also be helpful

Other helpful recommendations include adding a purpose statement to the Code and making the certification standard more explicit.[10] The proposal to drop the requirements to provide a target cover ratio also makes sense if the extended horizon discussed above is adopted.[11] The latter is a good substitute for the former because it discloses actual forward cover ratios for several years ahead, which is more meaningful than declarations about target cover ratios.

I am ambivalent about the recommendation to require participants to certify they have a Board-approved written policy for managing spot price risk and that the organisation's board actively monitors compliance.[12] The current stress test regime cuts to the chase. Rather than focus on company policies, it requires parties to calculate their risks and share them with their board, removing their ability to credibly claim they did not know the risks they were taking. Providing their results to the stress test registrar proves they undertook the test. Introducing further documentation requirements, which could be up to three years old, offers no additional proof that they knew the risks they were taking.

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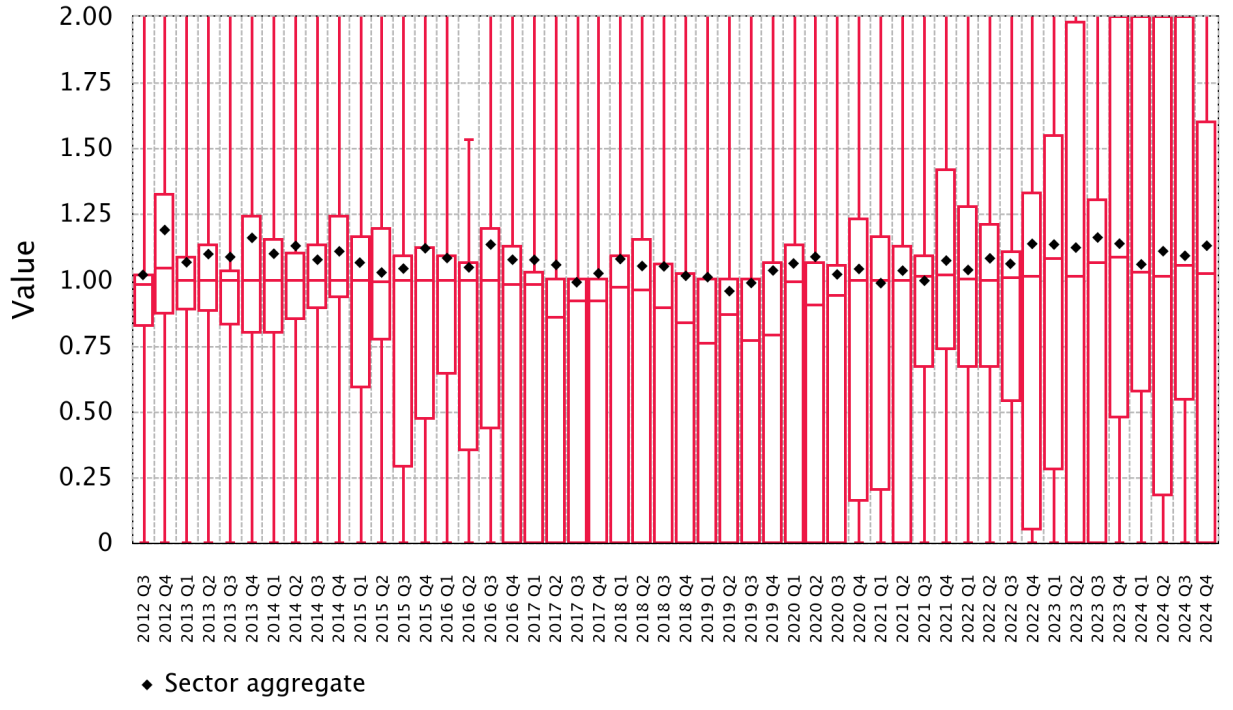
[7] The GPS refers to Recommendation 7 and Appendix C in MDAG (2023) *Price discovery in a renewables-based electricity system: Final recommendations paper,* Market Development Advisory Group (MDAG) of the Electricity Authority.
[8] MDAG (2023, para's C28-C31).
[9] MDAG (2023, para C31).
[10] MDAG (2023, para's C12-C14 and C22-C23).
[11] MDAG (2023, para C16).
[12] MDAG (2023, para's C17-C21).

MDAG also proposes that the registrar provide participants with 'you are here' reports. Currently, the registrar receives data from participants without any report back, avoiding any risk of releasing confidential information to the wrong parties. MDAG's proposal would introduce this risk. Presumably, an automated web solution would minimise the risk, but this would add additional cost to the regime.

Further, it is not evident that such reports would convey a sense that an under-hedged party is an outlier. Figure 1 shows there have been many quarters when 25% (or more) of stress test participants reported zero hedge cover. Without further context about these results (discussed later), 'you are here' reports could be interpreted as "we're in pretty good company!"

Figure 1: Box-and-whisker plot of the cover ratio results for the energy test, 2012-2024



Given these issues, a careful cost-benefit assessment should be undertaken to determine whether 'you are here' reports would be worthwhile. Grouping the "you are here" reports according to types of participants could make them more meaningful and enable the Authority to target its communications, potentially increasing the benefits from the initiative. Care would be needed to ensure de-anonymising isn't possible.

I am not convinced about the recommendation to simplify the stress test instructions. It is critical that interested parties can reliably compare the test results over time and across parties. A principles-based approach leaves too much scope for opportunistic parties to cut corners and give scant regard to the regime.

5. Further initiatives to strengthen the existing regime

Since 2012, stress tests have been conducted for two scenarios. An energy test is conducted to identify stress arising from several months of high spot prices due to low fuel supply, such as low hydro inflows, wind, gas and coal. A capacity test is also conducted. This assesses stress arising from generation capacity shortages at times of high demand, potentially lasting eight hours.

A significant change to the spot price parameter for the energy test appears to have had minimal impact on test results, making me wonder whether participants are undertaking the test correctly. I also believe there are opportunities to improve how the Authority presents the cover ratio results and promotes the stress test regime.

5.1 Are participants undertaking the test correctly?

Participants undertake their energy tests using spot prices specified by the Authority for a base case and an energy shortage scenario. Since 2012, prices for the base case have been set at $100/MWh. For the energy shortage scenario, the Authority specified a spot price of $250/MWh before January 2021 and $400/MWh since then.[13] This means *the price margin* over the base case doubled from $150/MWh to $300/MWh.

The doubling of the price margin in 2021 should have materially altered the cash flow impact of the test. For example, it should have doubled the cash flow impact for participants who did not change their hedge arrangements. The information on the EMI website makes it difficult to be definitive, but there does not appear to have been any material change in cash flow.

Figure 2 (next page) shows the number of participants undertaking the energy test and reporting cash flow ratios in six categories. The cash flow ratio is the change in cash flow caused by the test divided by the business's cash flow reported in the last set of audited accounts. The chart focuses on negative cash flow ratios, splitting them into five categories (brown, red, orange, green and turquoise). It reports the positive cash flow ratios as one group (blue).

Surprisingly, the doubling of the price margin is associated with fewer parties reporting negative cash flow ratios and no noticeable or consistent change in the number of parties reporting very low ratios (brown, red, orange). The 2021 Q2 result should be the first quarter affected by the doubled margin; however, fewer participants reported a negative ratio in that quarter than in the quarters immediately preceding it. Further, the number of participants with negative cash flow ratios over 2021-2024 is well below the number for 2016-2021. Although the number of parties in the brown, red, orange and green groups increased from 2022 onwards, the numbers look similar to 2016-2019.

One possibility is that the higher spot price specified for the energy shortage scenario spurred participants to materially increase their hedge cover, which should show up in improved cover ratios for under-hedged participants (those with cover ratios ≤ 1).[14] Unfortunately, the EMI website does not provide the information to assess this definitively.[15]

In practice, it is unlikely that cover ratios increased enough to fully offset the adverse cash flow effects of doubling the price margin. For example, a party with a 40% cover ratio would need to increase it to

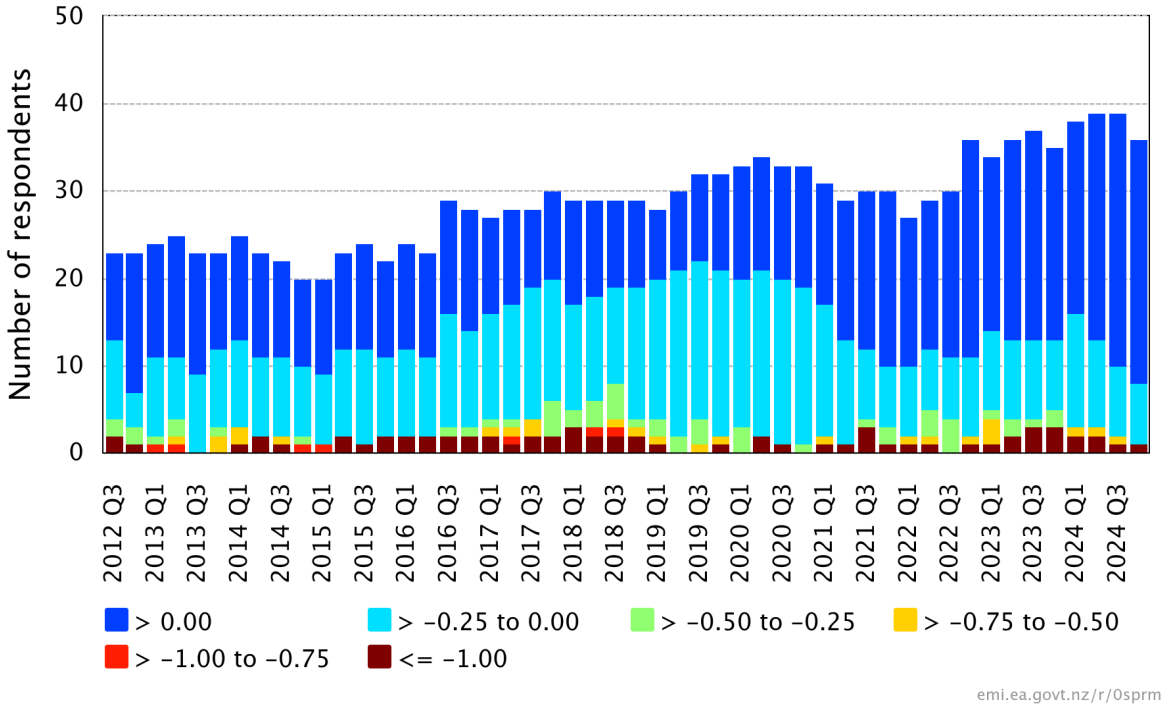
[13] Electricity Authority (2021) *Stress testing regime - stress tests: Base case, stress tests and application notes*. Electricity Authority Te Mana Hiko, available at https://www.ea.govt.nz/documents/5455/Stress_test_regime.pdf

[14] The cover ratio measures the extent to which increases in spot market purchase costs under the energy shortage scenario are matched by increased payouts from hedge arrangements (and from generation if the participant is vertically integrated). A 0.7 cover ratio, for example, means that a participant is 70% insured against high spot market prices.

[15] Neither the box-and-whisker plots of the cover ratio in Figure 1 nor the dispersion counts in Figure 3 provide definitive information.

70%, and a party with a 20% cover ratio would need to increase it to 60%.[16] More modestly, these cover ratios would need to increase from 40% to 55% and from 20% to 40% to halve the impact of doubling the price margin.[17]

Figure 2: Count of cash flow ratio results for the energy test, 2012-2024



In other words, if there had in fact been an increase in hedge cover sufficient to offset the higher stress test spot price, a significant number of participants would have shifted from having very low cover ratios (≤0.25) to modest ratios (0.25-0.75) and from modest to high ratios (0.75-1). Figure 3 on the next page suggests very few participants moved from one cover ratio category to another in 2021 Q2 and thereafter.

The upshot is that the doubling of the price margin should have significantly changed most participants' cash flow ratios or led them to materially alter their cover ratios to minimise the adverse impact on their cash flow. Figure 2 and Figure 3 suggest neither has occurred. This raises the question of whether participants are undertaking their stress tests correctly.

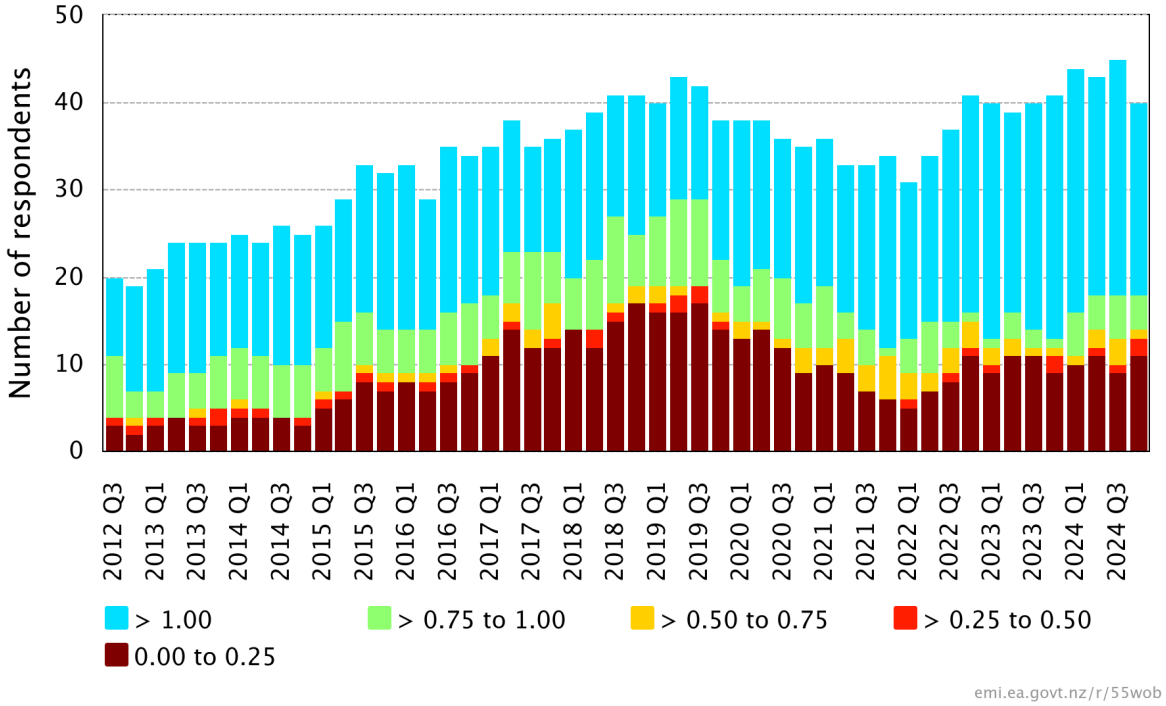
The Authority can address these concerns by preparing and publishing dot plots of the energy test metrics before and after the doubling of the price margin. As all metrics are ratios, and the results are reasonably variable, it would not be possible to identify which dots belong to individual participants.

If the dot plots confirm my suspicions, the Authority should appoint an auditor to review a broad sample of participants to understand how they calculate their results. Given the rationale for the stress test regime, the audit should focus on under-hedged parties.

[16] Let CR_0 denote a party's cover ratio before doubling the price margin, so (1 - CR_0) is the uncovered ratio. Halving the uncovered ratio fully offsets the doubling of the price margin. Hence, the cover ratio needs to increase to CR_1 = CR_0 + (1 - CR_0)/2 = (1 + CR_0)/2.

[17] The formula in this case is CR_2 = CR_0 + (1 - CR_0)/4 = (1 + 3CR_0)/4.

Figure 3: Count of cover ratio results for energy test, 2012-2024



5.2 The presentation of the results can be improved

The Authority summarises the stress test results on its EMI website in several forms. Out of those options, the form in Figure 3 (above) will be the most useful for journalists and media commentators, as it shows the number of participants with various levels of cover. For example, in the third quarter of 2023, eleven parties had cover ratios at or below 25%.[18]

In practice, however, the cover ratio results must be interpreted in the context of the other ratios. For example, the shareholder-equity ratio results (refer Figure 4 on the next page) suggest that none of the eleven parties would have lost more than 25% of their equity if the energy shortage scenario occurred in the third quarter of 2023.

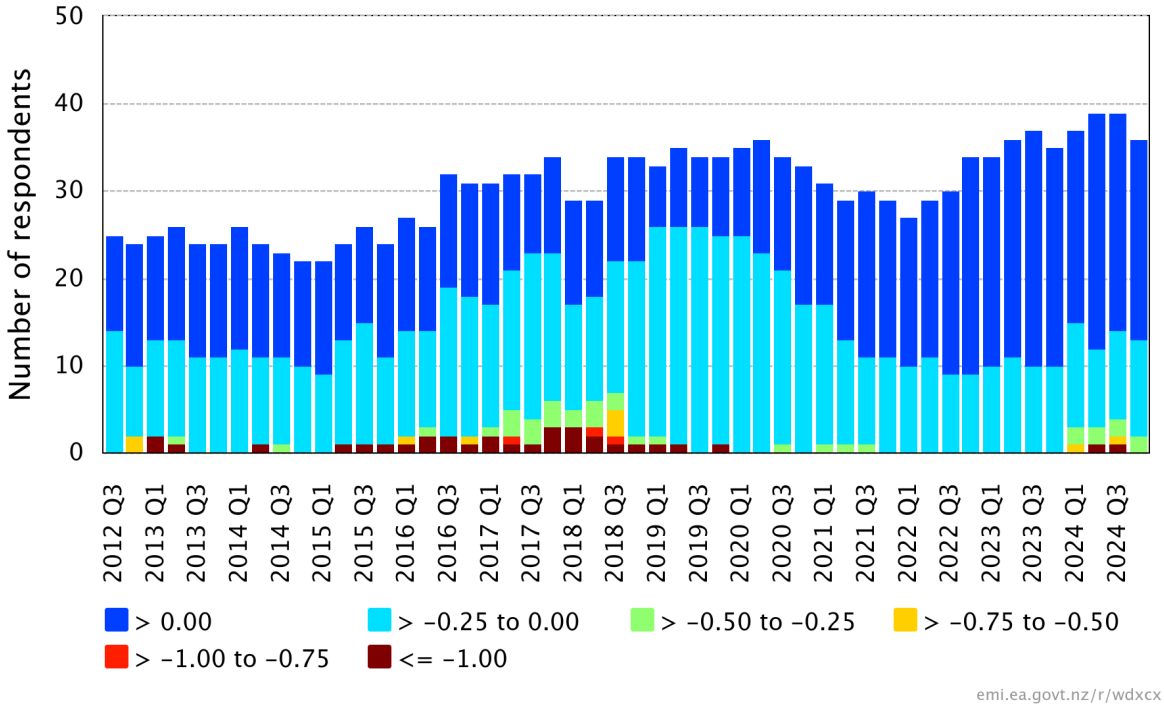
Figure 3 shows that a year later, in the third quarter of 2024, nine participants reported a cover ratio at or below 25%. However, the shareholder equity results in Figure 4 show one of the nine would have lost 100% of its equity, one would have lost up to 75%, and another two would have lost up to 50%. Clearly, the solvency implications of the low cover ratios in the third quarter of 2024 were far more severe than a year earlier.

Similar complications arise when cash flow impacts are considered. Figure 2 on page 10 shows that of the eleven parties with zero cover ratios in the third quarter of 2023, only three would have experienced a large, adverse impact on their cash flow (a cash flow ratio ≤ -0.5). Similarly, of the nine parties with zero cover ratios in the third quarter of 2024, only two had a cash flow ratio of less than or equal to -0.5.

[18] Interestingly, the box-and-whisker version of this chart (see Figure 1) shows that 25% of participants had zero cover ratios. As there were 40 participants for that quarter, this implies 10 parties had zero hedge cover.

These complications mean it would be helpful if the Authority presented conditional cover ratio statistics, such as a chart showing the number of parties with very low cover ratios and more than a 50% or 100% impact on shareholder funds.[19] The cover ratio could also be conditioned on cash flow ratios.

Figure 4: Count of shareholder-equity ratio results, 2012-2024



emi.ea.govt.nz/r/wdxcx

Alternatively, scatter plots of cover ratio versus equity ratios (or versus cashflow ratios) could be published. Taking this further, the Authority should consider assigning identifiers (letters or numerals) to participants and replace the dots with the identifiers. The scatter plot would allow readers to link the cover ratios for each participant with their equity and cash flow ratios and the identification numbers would allow them to trace the historical results of individual (but anonymous) participants.

In both cases, additional restrictions would be required to protect participant identities, as the entry and exit of participants (and perhaps large acquisitions) may be easy to identify in the plots. One approach would be to produce number plots for restricted periods and only include parties who participated in the stress test regime throughout the period.

Another option would be for the Authority to publish dot plots only when energy shortages occur. For example, the conditional cover ratio dot plot for the third quarter of 2024 could have been published in July when the severity of the energy shortage started to become apparent. The plot could be restricted to the cover ratios for under-hedged parties.[20] Using participant entry and exit information to identify participants would be impossible as the plot would be for a single quarter.

[19] For example, red could be used for cover ratios for parties where shareholder equity would be exhausted, pink for those where more than 75% would be lost, orange for those where more than 50% would be lost, and so on.

[20] Under-hedged parties are parties with a cover ratio < 1. The Authority should also consider whether applying a similar restriction to some of MDAG's recommendations would be net beneficial. For example, MDAG wants stress test participants to report the percentage of their future purchase volume hedged by contracts and physical resources.

5.3 The stress test regime and results should be actively promoted

When the electricity system is at significant risk of an energy shortage, the Authority should proactively inform the Energy Minister about how the regime works and the conditional cover ratio results. It should encourage the minister to ask parties seeking government intervention to confidentially disclose their cover ratio results and explain the reasons for their results.

The Authority should promote the stress test results through a media statement to remind interested parties that spot market purchasers are responsible for their risk exposure. The dot plot charts would make it easy for the Authority to point to the many participants who incur the cost of obtaining high levels of hedge cover, and the conditional aspect would show that only a few parties are at risk of exhausting their shareholder funds.

Given the sensitivity of these issues, the Authority should prepare and publish an internal policy on when it would undertake these actions.

6. Two further initiatives to reduce opportunistic behaviour

Under-hedging is a rational strategy for any industrial consumer that would not be viable if they bought hedges at pre-event prices (ie, before the risk of energy shortages became apparent). As most of the costs of permanently closing a plant are irreversible, industrial consumers face the choice of closing now and incurring those costs or proceeding under-hedged in the hope that spot prices come in lower than pre-event hedge prices. In other words, keeping the plant going has option value, as they can close it later if spot prices go against them. The problem is their opportunistic communication, not the lack of hedging (which is socially optimal given their circumstances).

6.1 Opportunistic communication increases the risk of regulatory failure

No business with low viability would announce it has adopted an under-hedging strategy. Its customers may worry about its supply reliability and switch to other suppliers. It would be more difficult to secure debt financing, and it may have to pay higher interest rates to compensate lenders for higher risk. If it is a listed company, its share price would face downward pressure.

If the under-hedging strategy paid off because of low autumn and winter spot prices, no business would subsequently reveal its strategy for the reasons given above. The commercially optimal approach is to keep quiet.

On the other hand, suppose the strategy is not paying off because of high spot prices. In that case, the next logical step for many unviable businesses is to argue for a direct bailout or intervention in the electricity market. Revealing that their strategy was a gamble, or the business was unviable at pre-event hedge prices, would greatly reduce their chances of a bailout. Instead, their incentive is to argue that pre-event hedge prices were above competitive levels.

The re-emergence of opportunistic lobbying in winter 2024 suggests further ‘belts and braces’ may be needed to address the above dynamic and reduce the risk of regulatory failure. Two initiatives worth considering are: regularly collecting information about hedge offers rejected by under-hedged parties; and quantifying the ‘swings and roundabouts’ of under-hedging. Both would be used to deflect opportunistic claims.

6.2 Regularly collect information about rejected hedge offers

The Authority recently published the findings of its investigation into over-the-counter hedges offered to the large energy users that permanently closed operations over the winter. The report shows that these parties rejected hedges offered at or below prevailing market prices.[21]

The main problem with the report is that it was not timely, as it was not available when the issue was receiving ministerial (and media) attention. The Authority should consider broadening the stress test regime to require materially under-hedged parties to report information about hedges they actively considered but did not purchase.[22] The stress test registrar would hold this information and provide it to the Authority when formally requested. As with its market options report, the Authority would inform the Energy Minister and publish a report.

6.3 Quantifying the 'swings and roundabouts' of under-hedging

The current regime focuses on the adverse cash flow impacts under-hedged businesses may experience during stress events. The flip side is that under-hedged parties gain cash flow benefits in the periods before the stress event occurs. However, media commentary focuses on the adverse side of the equation.

Publishing estimates of the pre-event cash flow gains for a hypothetical under-hedged participant and comparing them with the losses during a stressful event would provide a more balanced picture to journalists, ministers and other media commentators. A suitably worded report or media statement from the Authority would encourage journalists to ask complainants about their profits before the stress event and why they didn't hedge. Complainants with poor commercial viability would come under pressure to acknowledge they did not hedge either because it was a more profitable strategy or because the business was not profitable at pre-event hedge prices. Either way, this would reduce the credibility of opportunistic communications strategies.

7. Way forward

The Authority published on 23 October 2024 its second quarter report on progress with MDAG's recommendations.[23] According to that report, the Authority is currently scoping its review of the stress test regime and intends to commence work on it in 2025. Given the above concerns, it would be wise for the Authority to improve the regime urgently, which it could do by adopting a two-phased review.

7.1 First phase of review to address non-Code initiatives ahead of winter 2025

The first stage should focus on matters the Authority can complete before winter 2025. Practically, this means adopting initiatives that do not require further information from participants and can be implemented under current Code provisions.

This could include:

[21] The report is available at https://www.ea.govt.nz/news/eye-on-electricity/market-options-were-available-to-large-energy-users-in-winter-2024/

[22] *Materially under-hedged* parties could be defined as those with a cover ratio ≤ 0.5 and one other ratio ≤ -0.5, and *actively considered hedges* could be over-the-counter offers of hedges containing price offers.

[23] https://www.ea.govt.nz/documents/5927/MDAG_programme_dashboard_-_Quarter_two.pdf

1. Reviewing dot plots of the energy test metrics before and after the doubling of the spot price margin to ascertain whether participants are undertaking the tests correctly. If not, the Authority should appoint an auditor to engage with participants, particularly under-hedged ones.
2. Publishing charts of conditional cover ratio results, such as one showing the number of participants exhibiting a combination of (a) low cover ratios and (b) low cash flow and shareholder equity ratios.
3. Adopting an internal policy regarding when the Authority should proactively inform the Minister of Energy about the conditional cover ratio results, why the stress test regime was adopted and how the Minister can leverage it to reduce incentives for opportunistic lobbying.
4. Adopting an internal policy regarding the circumstances in which the Authority will (a) proactively publish restricted and conditional dot plots for quarters when spot market stress is occurring and (b) promote the results through a media statement to remind interested parties that spot market purchasers knew the risks they were taking.
5. Preparing an explanatory note that (a) estimates pre-event cash flow gains for a hypothetical under-hedged participant and compares those gains with potential losses during stress events and (b) explains that parties under-hedge because they believe it is a more profitable strategy or because they are not profitable at pre-event hedge prices.

7.2 Second phase review to address all other matters ahead of winter 2026

The second phase should be pursued with the urgency and resources needed to complete it before winter 2026. The initiatives in this phase would require formal Code amendment proposals and consultation with interested parties. Given the time these processes take, work on the second phase may need to proceed before the first phase is completed.

If needed, priority should be given to:

1. MDAG's recommendation that the horizon of the stress tests be extended several years ahead.
2. Broadening the stress test regime to require materially under-hedged parties to report information about hedges they actively considered but did not purchase.

Both initiatives have the potential to materially reduce incentives for opportunistic hedging, lobbying and communication behaviour. Other MDAG recommendations may be worthwhile; however, they are unlikely to materially reduce those incentives.