

Four-monthly report to the Minister of Energy and Resources

For the period 1 November 2022 to
28 February 2023

24 April 2023

Executive summary

The Electricity Authority (Authority) provides you with a four-monthly report in accordance with the output agreement. This report gives an overall summary of performance, and includes information on exceptions, where necessary.

This report covers the four-month period 1 November 2022 to 28 February 2023. Where milestones have occurred outside of the four-monthly period, these have been included to provide further information and context to our work.

Update on Ministerial priorities

Energy sector strategic planning/readiness for change: The Authority is responsible for leading several actions in the Government's Emissions Reduction Plan and is progressing these workstreams.

The Authority is working on phase three of the future security and resilience (FSR) workstream to implement activities identified in the FSR roadmap, which was released on 23 August 2022.

The Authority's Market Development Advisory Group (MDAG) is continuing its investigation into price discovery in the wholesale electricity market under a 100 percent renewable electricity supply and released an options paper *Price discovery in a renewables-based electricity system* for consultation on 6 December 2022. Consultation on the options paper closed on 6 March 2023.

Real-time pricing (RTP) in the wholesale electricity market went live on 1 November 2022 and the Authority amended the Electricity Industry Participation Code 2010 (Code) to support the implementation. In early November 2022, the Authority held its first in-person event since COVID-19 to celebrate the introduction of RTP. The final phase of the RTP project is scheduled to go live on 27 April 2023 with the dispatchable demand and dispatch notification being released, enabling participants to bid and offer their demand flexibility and distributed energy resources (DER) into the wholesale market.

On 1 April 2023, the new Transmission Pricing Methodology (TPM) came into effect. In November 2022, the Authority decided to amend Part 12 of the Code to correct several issues in the new TPM identified by stakeholders. The amendments will ensure the new TPM continues to be fit for purpose and provides long-term benefits for consumers. In November 2022, the Authority also decided to amend the Code to provide for the development of a new Settlement Residual Allocation Methodology (SRAM). The Code amendment came into effect on 1 April 2023. In December 2022, the Authority decided to amend the Code to make it clear that payments by distributors to eligible distributed generators for avoided cost of transmission (ACOT) are no longer required.

In June 2022, the High Court dismissed Manawa Energy's (formerly Trustpower) application for judicial review of the 2020 TPM Guidelines decision. The decision has since been appealed by Nova Energy Limited, and the hearing is set to take place in late April 2023.

Buller Electricity has launched judicial review proceedings against Transpower and the Authority in response to an increase in its transmission charges under the new TPM. Buller has reached an interim agreement with Transpower that any increases in transmission charges are to be put on hold until after the judicial review has been completed. The hearing is due to take place in July/August 2023.

On 20 December 2022, the Authority published an issues paper for consultation *Updating the Regulatory Settings for Distribution Networks*. Consultation closed on 28 February 2023 (however consultation was extended for some submitters to 14 March 2023, reflecting the resource pressure created by Cyclone Gabrielle), and will enable the first stages of a long-term work programme to be set out, with the high-priority projects to be progressed immediately.

The Authority has been preparing for the re-start of its distribution pricing scorecards in 2023 and in December 2022 made changes to the assessment approach for the upcoming 2023 scorecards. The Authority intends for the scorecards process to provide an avenue for distributors to engage with the Authority as well as a method for driving faster reform.

Confidence in the market: The Authority is actively monitoring trading conduct as part of the new trading conduct provisions, which came into effect on 30 June 2021. We publish weekly reports on the Authority's website to identify trading periods of interest, which form the basis for further enquiries.

The Authority published its *Compliance Strategy and Compliance Monitoring Framework* on 5 July 2022 and has since updated the documents to reflect the passing of the Electricity Industry Amendment Act 2022, and the Authority's additional statutory objective.

Alongside the review of the events of 9 August 2021, the Authority investigated the claim of an undesirable trading situation (UTS) and on 28 June 2022, concluded there was no UTS. This decision has since been appealed and a hearing on the appeals occurred on 27 and 28 February 2023. It is likely the judgment of the Court will not be available until late May or early June 2023.

On 12 April 2022, the Authority laid a formal complaint with the Rulings Panel against Transpower as the system operator in relation to alleged breaches of the Code pertaining to the 9 August 2021 outage event. The matter has been settled by the parties and is currently before the Rulings Panel to be finalised.

Competition in the wholesale market: The Authority released an Issues Paper on proposals to promote competition in the wholesale electricity market in the transition towards 100 percent renewable electricity. Consultation closed on 14 December 2022 and the Authority received 31 submissions, which will be considered prior to making decisions on next steps.

Consumer protection: The Electricity Industry Amendment Bill was enacted on 31 August 2022. Changes came into effect on 1 September 2022, with the exception of the additional statutory objective to protect the interests of domestic consumers and small business consumers in relation to their electricity supply, which came into effect on 31 December 2022. The Authority has developed an implementation programme to address changes stemming from the Act. Many aspects of this are complete. Longer-term work required is being transferred from the implementation project team into business-as-usual for the relevant business unit.

Engaging with stakeholders and consumers: The Authority actively engages with industry stakeholders, participants, and consumers. Between November 2022 and February 2023, the Authority consulted on seven initiatives. Some of these consultations were complemented with additional ways for participants to engage, such as online information sessions and opportunities to meet directly with project teams.

The Authority is working on a 12-month engagement plan for our Board and Senior Leadership Team, supporting the introduction of our new Chief Executive and two new Board members and giving key stakeholders the opportunity to discuss current issues and collaborative approaches to address these. The Board has endorsed a Communications and Engagement Strategy for

2023 to ensure a cohesive and deliberate response to stakeholder feedback captured in the 2022 Electricity Authority Stakeholder Perception Survey.

The Authority launched a new website on 31 March with more user-friendly content, and improved navigation and functionality. Our new website is focussed on increased understanding of the electricity sector across the New Zealand public and to encourage diverse perspectives in our regulatory decision-making process.

We are actively developing our relationships with other agencies and interest groups and seeking opportunities to collaborate.

Other interests and emerging issues

Cyclone Gabrielle: Following the catastrophic impact of Cyclone Gabrielle, the Authority has taken steps to alleviate additional pressure on the electricity sector as the industry works to restore power and mend power networks. The Authority encouraged any market participants unable to fulfil Code requirements at the time to contact the Authority for guidance. We also extended consultation periods to allow industry extra time to submit on key areas of interest.

2022/23 and 2023/24 levy-funded appropriations consultation: The Authority consulted on its 2022/23 and 2023/24 levy-funded appropriations from 4 October to 4 November 2022. You received the summary of submissions along with the request for appropriations in February 2023. On 9 March 2023 you agreed to a permanent baseline increase of \$0.500 million for 2022/23 and \$4.600 million for 2023/24 and outyears. The Authority has committed to a baseline review prior to consulting on funding for the 2024/25 financial year. MBIE has appointed Sapere Research Group (Sapere) to conduct the review.

Supporting better outcomes for consumers: The Authority's current contract with Consumer NZ to provide Powerswitch, a website for consumers to compare electricity plans, is set to expire at the end of the financial year. s9(2)(b)(ii)

Hedge market enhancements: further update on Australian Securities Exchange (ASX) access: Access for some New Zealand electricity market participants to New Zealand traded futures on the ASX futures market were restricted from 31 October 2022 onwards, meaning they were limited as to how many future contracts they could hold. On 31 October 2022, the Authority proceeded with a voluntary request for over the counter (OTC) information from market participants likely to have limited or no access to the ASX futures market. The Authority has reviewed information provided by market participants. The Authority is undertaking enhanced monitoring of the situation.

The Authority is facilitating an industry led working group to consider whether the efficiency of the OTC market could be improved, and the benefits of making appropriate expectations of the performance of the market and its participants more transparent.

Winter 2023: The system operator has expressed concerns about the outlook for Winter 2023. Referring to its *Security of Supply Assessment* published in June 2022, the system operator suggested that under certain scenarios the winter capacity margin could fall under the security standard in the Code as early as 2024. On 25 November the Authority consulted on 11 options to address the Winter 2023 peak demand issue while protecting the long-term interests of consumers – and in most basic terms to do everything the industry can to avoid electricity cuts

in the upcoming winter. Consultation closed on 16 December 2022 and the 29 submissions received have been published on the Authority's website. A Decision paper was published on 9 March 2023. In that paper, the Authority confirmed which options it was progressing for Winter 2023 and which options were being considered as part of the Authority's work programme for potential implementation for Winter 2024. After the Decision Paper further options have been confirmed by the Authority.

Ensuring orderly thermal transition: transitioning to 100 percent renewable energy generation involves a declining role for thermal baseload generation. The Authority has analysed whether there are some risks that could prevent an orderly transition, such as premature thermal plant closure. The Authority intends to publish a consultation paper in the first half of 2023.

Security of Supply Forecasting and Information Policy (SOSFIP): On 22 November 2022, consultation closed on two proposed changes the Authority would like the system operator to make to the SOSFIP. Consultation on the Authority's proposed changes stemmed from the system operator's proposed replacement SOSFIP incorporating changes from the 2021 dry year event.

Review of the forecasting provisions for intermittent generators in the spot market: The Authority has initiated a project to review the forecasting provisions for intermittent generators in the spot market. The Authority is concerned that uncertainty in forecasts ahead of real time affects other participants' trust and confidence to make consumption and generation decisions in response to forecast schedules. The Authority intends to publish an Issues and Options Paper in the first half of 2023 to consult on the problem definition and possible policy solutions.

Review of the Authority's consultation charter and feedback processes: The Authority has reviewed its consultation charter to make the charter more accessible and to specifically include non-industry participants such as small businesses and domestic consumers. The latter is in response to the Authority's additional statutory objective which came into effect in December 2022. The Authority has also taken the opportunity to review and streamline the Code amendment request process, establish a new advisory group, update the charter and terms of reference for advisory groups, and review the amendment processes for the documents incorporated by reference. Consultation on the proposed changes closed on 21 March 2023 and was extended to 4 April 2023 for submitters affected by Cyclone Gabrielle.

Progress against our Annual Corporate Plan

This section includes a progress update on the activity areas identified in our Annual Corporate Plan 2022/23. As at 28 February 2023, eight of the nine activity areas were on track to achieve their desired annual outcome. One activity area is at risk of not being achieved. Further details are provided in section two of this report.

Output performance

The business-as-usual outputs are set out in our Statement of Performance Expectations (SPE). As at 28 February 2023, 11 out of 13 output performance measures were on track. Two output performance measures were not on track to meet their 2022/23 target. Further details are provided in section three of this report.

Organisational development

Section four of this report includes an update on how our organisational development and capability strategies are progressing.

Financial performance

Financial performance information for the period 1 July 2022 to 28 February 2023 is included as section five of this report.

Audit and risk

Section six of this report provides information about audit and risk matters relating to the period 1 November 2022 to 28 February 2023, as specified in the output agreement. The Authority's risk approach considers changes to the operating environment, new and emerging technology, broader climate change response and the changing needs of our stakeholders. These are long-term risks which remain relatively constant over time.

The risk rating for 'Staff capability and capacity' was revised up from 'High' to 'Critical'. This rating has been revised up since the last reporting period due to the employment market and the staff turnover during the period.

The high-level risks are all being managed and monitored through proactive management action. There were no material audit issues to report.

Contacts

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1 Introduction

Update on Ministerial priorities

- 1.1 This section provides an update on the specific priorities and expectations laid out in your annual Letter of Expectations for 2022/23.
- 1.2 In your annual Letter of Expectations for 2022/23, you set out strategic and performance expectations for the Authority in the current financial year, with a focus on:
 - (a) workstreams contributing to the Emissions Reduction Plan and Energy Strategy
 - (b) monitoring and compliance activities to continue to enable confidence in the market
 - (c) addressing the recommendations from the reviews of the events of 9 August 2021
 - (d) prioritising actions to strengthen competition in the wholesale market
 - (e) implementation of the Electricity Industry Amendment Act 2022
 - (f) progressing regulatory settings for distribution networks, transmission, and distribution pricing reform.
- 1.3 We provided an initial response to these expectations on 5 April 2022. A further update to our initial response is provided below.

Energy sector strategic planning/readiness for change

- 1.4 The Authority published its Energy Transition Roadmap in late 2021. The work set out in the roadmap provides the basis for the Authority's support for the first Emissions Reduction Plan and development of the Energy Strategy. The roadmap is a living document, which we will update as necessary to support the Emissions Reduction Plan and Energy Strategy.

Emissions Reduction Plan

- 1.5 The Authority is responsible for leading a number of actions in the Government's Emissions Reduction Plan, some of which are multi-year workstreams and will result in major regulatory reform. This report outlines progress in the following workstreams:
 - a) Future Security and Resilience
 - b) Market Development Advisory Group's investigation into a renewables-based electricity system
 - c) Real-time pricing
 - d) Transmission Pricing Methodology
 - e) regulatory settings in the distribution sector
 - f) distribution pricing.

Future Security and Resilience (FSR)

- 1.6 New Zealand's transition to a low-emissions energy system will involve many changes including emerging technologies for generation, consumers, and supporting services. The Authority's FSR workstream will ensure that, through the transition, our power system remains secure, resilient, and promotes long-term benefits for consumers.

- 1.7 Phase one of the project is complete, with the final report *Opportunities and challenges to the future security and resilience of the New Zealand power system* published in March 2022. Phase two saw the publication of a 20-year roadmap of work published on 23 August 2022.
- 1.8 Phase three of the project is underway to implement the activities in the roadmap. This involves three workstreams:
- FSR indicators:** Indicators to monitor changes that could affect security and resilience – this is to help ensure we have the correct FSR activity prioritisation. The Authority plans to publish the dashboard of indicators in the first half of 2023.
 - Review of Part 8 of the Code:** Review of the extent to which common quality obligations in Part 8 of the Code appropriately accommodate and facilitate technologies. The Authority plans to publish an issues paper for consultation in the first half of 2023.
 - Future system operation:** The problems or opportunities with current system operation arrangements that will need to be managed given the expected changes to the electricity system. The Authority is analysing future system operation and developing a plan to progress this workstream.

Market Development Advisory Group (MDAG) investigation into a renewables-based electricity system

- 1.9 The Authority's MDAG is investigating price discovery (including market operation and new investment in generation) in the wholesale electricity market under a renewables-based electricity system. On 6 December 2022, MDAG published a paper Price discovery in a renewables-based electricity system, with proposed options to address issues identified in earlier work. The consultation for this paper closed on 6 March 2023. MDAG has received 33 submissions. MDAG is planning to deliver its final advice to the Authority by June 2023.
- 1.10 There is broad support for many options MDAG has proposed, particularly options that would help to increase public confidence in the market. A number of submitters have also commented on the difficulties associated with ensuring reliable and efficient operational coordination as we transition to a system with more intermittent generation and are pleased to see options to address this being considered.

Real-time Pricing

- 1.11 On 1 November 2022, RTP went live in the wholesale electricity market, meaning more accurate and reliable pricing that better reflects the cost of supplying electricity. RTP will provide a low-cost method for smaller-scale interaction with the wholesale market and will enable smaller providers to bid and offer their resources into the wholesale market. This will allow spot price exposed participants to manage their market exposure more reliably using demand management and Distributed Energy Resources (DER). Consumers can now make better informed consumption decisions leading to more efficient pricing outcomes overall.
- 1.12 Under RTP, scarcity pricing will automatically be applied to any reserve or energy shortfall in the forecast and dispatch market schedules. This will provide early price signals around a possible shortfall to generators and information that consumers need to either reduce their demand or use DER to provide extra supply to the market.

- 1.13 All relevant regulatory and operational policy changes went live on 1 November 2022 to coincide with the main software release.
- 1.14 In early November 2022, the Authority hosted an event in Wellington to celebrate the introduction of RTP. This was the Authority's first in-person event since COVID-19, and over 40 industry stakeholders attended.
- 1.15 The final phase of RTP is scheduled to go live on 27 April 2023 with the dispatchable demand and dispatch notification being released. After this date participants will be able to bid and offer their demand flexibility and DER into the wholesale market.

Transmission Pricing Methodology (TPM)

- 1.16 On 1 April 2023, the new TPM will come into effect. The new approach to transmission pricing will benefit consumers through lower prices and more energy consumption at peak times when it is most valued. Better price signals will lead to the right generation, transmission and other investments being made in the right place at the right time to support New Zealand's efficient transition to a low-emissions economy.
- 1.17 In November 2022, following consultation, the Authority decided to amend Part 12 of the Code to correct several issues in the new TPM identified by stakeholders. The amendments include fixes to typographical issues in the TPM, corrections to formulas for calculating rebates and residual charge reduction events, improvements to the workability of the continuing benefit-based investment mechanism, and more. The amendments will ensure that the new TPM continues to be fit for purpose and provides long-term benefits for consumers. The amendments were made in consultation with Transpower, on a timeline that allowed Transpower to communicate transmission charges for the pricing year starting 1 April 2023 to its customers (which it did in early December 2022).
- 1.18 Also in November 2022, having taken into consideration all submissions, the Authority amended the Code to provide for the development of a new Settlement Residual Allocation Methodology (SRAM). The Authority introduced requirements for distributors to pass through settlement residue to their customers. The Authority believes these changes best align with the Authority's main statutory objective by improving the efficient operation of the electricity industry and promoting competition. The Code amendment achieves this by supporting efficient incentives for grid usage and investment, which over time should lead to lower prices for delivered electricity. The Code amendment will come into effect on 1 April 2023.
- 1.19 Transpower is required to pay settlement residual rebates to its customers using the new SRAM from May 2023 and in doing so will incur some implementation costs. The Authority intends to propose an amendment to the benchmark agreement and the Code to enable Transpower to recover these implementation costs from its customers. This will be the first stage of a planned two-stage review of the benchmark agreement. The Authority will provide guidance for distributors on how to pass rebates through to their customers.
- 1.20 In December 2022, having considered submissions, cross-submissions, engagement with Transpower (as grid owner) and feedback on grid reliability, the Authority amended the Code to make it clear that payments by distributors to eligible distributed generators for avoided cost of transmission (ACOT) are no longer required. The changes are consistent with the new TPM and work with it to deliver significant benefits to consumers and support New Zealand's efficient transition to a low-emissions economy.

- 1.21 In June 2022, the High Court dismissed Manawa Energy's (formerly Trustpower) application for judicial review of the Authority's 2020 TPM Guidelines decision. The Authority is currently working on its response to the subsequent appeal of the High Court decision by Nova Energy Limited. The hearing will take place from 19 to 20 April 2023.
- 1.22 Buller Electricity has launched judicial review proceedings against both Transpower and the Authority in response to an increase in its transmission charges under the new TPM. Buller estimated power bills for its consumers would increase by 20 percent or more as a result of Transpower reclassifying grid assets that serve Buller. Buller has since reached an interim agreement with Transpower where any increases in transmission charges are to be put on hold until after the judicial review has been completed later this year. The hearing is due to take place from 31 July to 2 August 2023.
- 1.23 We do not expect either of these appeals will affect Transpower's implementation of the TPM, which is ongoing (but they may have an effect on the TPM going forward, depending on the Courts' findings).

Regulatory settings in the distribution sector

- 1.24 The Authority is working to ensure consumers benefit from new technologies introduced as part of the transition to a low-emissions economy. We are progressing work on potential issues regarding distribution networks and potential regulatory options that may be needed to support this.
- 1.25 On 20 December 2022, the Authority published an issues paper for consultation *Updating the Regulatory Setting for Distribution Networks*. Consultation on the issues paper closed on 28 February 2023 (however was extended for some submitters to 14 March 2023, reflecting the resource pressure created by Cyclone Gabrielle) and will enable the first stages of a long-term work programme to be set out, with the high priority projects to be progressed immediately.
- 1.26 The paper seeks views and feedback on how regulatory settings can support distribution networks with the uptake of non-network solutions and flexibility services. Non-network solutions (NNS) such as demand management and DER can both unlock new possibilities in reducing peak demand and help to save on future grid and network investment.
- 1.27 Consensus is emerging across the electricity industry that a high level of uptake of NNS and flexibility services is critical to ensure that sector transformation occurs in the lowest-cost manner whilst enabling the best outcomes for consumers. The paper identifies concerns and proposes "least regrets" options for consultation that should benefit efficiency and competition regardless of how the emerging market for NNS or flexibility services develops.
- 1.28 There are some short-term measures the Authority considers would promote equal access to granular data on network congestion and visibility of DER (such as solar installations, inverters, and electric vehicles).
- 1.29 The Authority also suggests options to encourage the provision and competitive procurement of NNS, measures relating to DER standards, and enhancing collaboration to increase sector capability.

Distribution Pricing

- 1.30 The Authority continues to encourage distributors to reform their pricing structures to promote a more efficient transition to a low-emissions future. Encouraging efficient

investment will help prevent consumers' electricity prices from rising too high during the transition.

- 1.31 The Authority has been preparing to re-launch its distribution pricing scorecards in 2023, following a pause in 2022 (which allowed Authority staff to engage more with distributors and allowed distributors to have more time to address the guidance in the second edition *Distribution Pricing Practice Note* in their approaches for pricing in 2023). In December the Authority reviewed the scorecard assessment process and made some changes to its assessment approach for the upcoming 2023 scorecards. The scorecards will provide an avenue for distributors to engage and will be a method of driving faster reform.
- 1.32 The Authority's scorecards of distributors' 2023/24 pricing methodologies will be centred around the five focus areas set out in its open letter to distributors of September 2022 (which include, for example, planning for future network congestion, including congestion expected due to increasing charging of electric vehicles). The Authority's assessment will also be informed by its October 2022 update to its *Distribution Pricing Practice Note* to incorporate new guidance for distributors on how to pass transmission charges through under the new TPM.

Confidence in the market

- 1.33 The Authority is acutely aware that a predictable regulatory regime is essential to support the sector through uncertainty and pave the way for future investment in New Zealand's renewable future.
- 1.34 The Authority is focused on education to achieve voluntary compliance, active monitoring, as well as timely and proportionate enforcement action. The Authority's education programme and activities includes improved channels and content to communicate and share information about the sector and the rules to a broad audience to support understanding and increase confidence in the sector, and in the market.

Market monitoring

- 1.35 The Authority is actively monitoring trading conduct as part of the trading conduct provision which came into effect on 30 June 2021. The Authority publishes weekly reports on its website, which identify trading periods that are of interest, and form the basis for further enquiries.
- 1.36 The Authority sought information from a number of generators to understand instances of high prices over November 2022. The Authority was satisfied with the reasons provided and has published its analysis on the Authority's website.
- 1.37 The Authority also sought information from a generator about changes in offer prices prior to the Grid Emergency Notice on 7 October 2022. Analysis is ongoing.
- 1.38 One case was presented to the Compliance Committee on 17 February, where the Authority noticed some high-priced offers at a hydro generation unit while spilling was occurring in February 2022. The Compliance Committee decided there was no breach of the trading conduct clause in this case.
- 1.39 A review of the impact of the regional coincident peak demand (RCPD) charge removal on peak demand was recently published. This analysis has contributed to the evidence-base for the Authority's decision paper on driving efficient solutions to promote consumer interests through Winter 2023.

Compliance strategy

- 1.40 A proactive monitoring and compliance function is critical to maintain and build trust and confidence in the electricity market.
- 1.41 On 5 July 2022, the Authority published its *Compliance Strategy* and *Compliance Monitoring Framework*. The *Compliance Strategy* structures the Authority's compliance approach to focus its resources on the most serious and highest priority risks. The Strategy establishes guiding principles and objectives for the Authority, under which further policies and procedures will be developed for specific compliance activities such as participant registration, participant auditing, education, monitoring, investigation, and enforcement.
- 1.42 The associated *Compliance Monitoring Framework* has been established to identify those areas of the Code where non-compliance is difficult to detect, and impact could be significant. It is being used to guide proactive compliance activity.
- 1.43 The *Compliance Strategy* and *Compliance Monitoring Framework* have been updated to reflect the passing of the Electricity Industry Amendment Act 2022, and the Authority's additional objective.
- 1.44 In addition, the review frequency for the *Compliance Monitoring Framework* has been shortened from three to two years, to align with the review frequency for the *Compliance Strategy*.

Responding to the events of 9 August 2021

- 1.45 On 9 August 2021, approximately 34,000 customers experienced an electricity cut without warning on one of the coldest nights of the year. Several reviews followed, including by the Authority, Transpower and MBIE. All recommendations from those reviews are now complete and/or part of business-as-usual operations. The Authority is also pursuing various initiatives to help ensure preparedness for Winter 2023 and will provide you with separate briefings on those aspects of its work.

Undesirable trading situation

- 1.46 Alongside the review of the 9 August 2021 event, the Authority investigated the claim of an Undesirable Trading Situation (UTS) made by Haast Energy Trading Limited and Electric Kiwi Limited (later joined by Flick Energy Limited (Flick Electric) and Switch Utilities Limited). The Authority released its final decision on 28 June 2022 and concluded that there was no UTS. Haast Energy Trading Limited and Electric Kiwi Limited appealed against the Authority's decisions on the claimed UTS and pricing error claim. The Court granted an application by the Appellants that prices for the affected trading periods remain interim until the appeals have been determined. The substantive hearing on the appeals occurred on 27 and 28 February 2023. It is likely the judgement of the Court will not be available until late May or early June 2023.

System operator investigation

On 12 April 2022, the Authority decided to lay a formal complaint with the Rulings Panel against Transpower as the system operator in relation to a number of alleged breaches of the Code. This matter has been settled by the parties and is currently before the Rulings Panel to be finalised.

Competition in the wholesale market

Wholesale market review

- 1.47 As covered in previous reports, the Authority has been working to review the structure, conduct and performance of the wholesale electricity market from January 2019 until June 2021, with a number of papers published for consultation in recent months.
- 1.48 In August 2022, the Authority released a consultation paper in response to the prior year's Issues Paper – *Inefficient price discrimination in the wholesale electricity market – Issues and options*.
- 1.49 At the same time the Authority made urgent Code in 2022 to prohibit some forms of very large contracts for the physical supply of electricity, subject to a clearance regime. The Authority received 17 submissions on its proposal for an enduring solution and expects to publish its decisions in April 2023.
- 1.50 On 12 October 2022, the Authority released the next phase of the Wholesale Market Competition Review. This was initially scheduled for mid-2022, however was delayed due to significant operational impacts from COVID-19.
- 1.51 The Authority released an Issues Paper on proposals to promote competition in the wholesale electricity market in the transition toward 100 percent renewable electricity. The Issues Paper is the Authority's forward-looking response to the structure, conduct and performance review of the wholesale electricity market given the period of elevated electricity prices since the 2018 Pohokura gas field outage. The paper proposes and seeks feedback on a range of interventions aimed at bringing forward and increasing the amount of investment in net new renewable generation.
- 1.52 Consultation closed on 14 December 2022 and the Authority received 31 submissions. Submissions have been published on the Authority's website and will be considered prior to making decisions on any next steps.

Consumer protection

- 1.53 The long-term benefits of consumers are central to the work of the Authority. As the electricity regulator, our responsibility is to all New Zealand electricity consumers including making sure consumers have choice and can participate in energy markets.

Implementing the Electricity Industry Amendment Act 2022

- 1.54 The Electricity Industry Amendment Bill was enacted on 31 August 2022. Changes came into effect on 1 September 2022, with the exception of the additional statutory objective and function for the Authority to protect the interests of domestic consumers and small business consumers in relation to their electricity supply, which came into effect on 31 December 2022. The additional objective applies only to the Authority's activities in relation to the dealings of industry participants with domestic consumers and small business consumers. The Authority has added an explanatory note to the Interpretation Document to note the additional statutory objective.
- 1.55 The amendment also transfers the Part 3 Arms-Length rules from the Act into the Code (a new Part 6A) to give the Authority the ability to respond quickly to technological changes and promote competition and innovation in emerging distributed energy markets. It also strengthens the Authority's enforcement regime through increased penalties and gives the Authority the ability to set information and quality requirements for distributors.

- 1.56 The Authority has developed an implementation programme to address changes stemming from the Act. Many aspects of this are now complete such as legal analysis of how the changes affect the Authority; incorporating the new Part 6A into the Code; and updates to policies, procedures, guidelines, and web content to ensure alignment with the Act. Longer-term work required, such as considering updates of the arms-length rules and implementing changes to the Compliance Framework, is being transferred from the implementation project team into business-as-usual for the relevant business units.

Engaging with stakeholders and consumers

- 1.57 The Authority actively engages with industry stakeholders, participants, and consumers. Between November 2022 and February 2023, the Authority consulted on key issues including options ahead of Winter 2023 and distribution networks. Seven consultations were open for feedback over this period. These formal consultations are complemented with additional ways for participants to engage, such as online information sessions, as well as offering opportunities to meet directly with project teams. Allowing greater opportunities to engage will increase transparency and improves participants trust and confidence in the Authority and the work we do.
- 1.58 The Authority has implemented an annual engagement plan for our Board and Senior Leadership Team, supporting the introduction of our new Chief Executive and two new Board members while giving existing and emerging key stakeholders the opportunity to discuss current issues and how we can work together to address them. The Board recently endorsed the 2023 Communications and Engagement Strategy to enable a cohesive and deliberate response to stakeholder feedback captured in the 2022 Electricity Authority Stakeholder Perception Survey.
- 1.59 The Authority is taking the opportunity to develop and mature our relationships with other agencies and interest groups and seek opportunities to collaborate. We are in the process of drafting a Memorandum of Understanding with the Consumer Advocacy Council to ensure we capture diverse voices in decision making process and share our insights and information with the Council to support their role.
- 1.60 Outside the reporting period, the Authority launched a new website on 31 March 2023 with user-friendly content, improved navigation and functionality. Our old website was not fit for purpose and its unwieldy size (4,500 pages and 16,000 documents) created storage and usability issues. Our website has a dedicated section for consumers with, for example, information on how electricity works, ways to save energy and how to understand power bills. It also has industry-specific information for including the Electricity Industry Participation Code, guidelines and advice for meeting Code obligations and information on our compliance function and processes. The user interface is a significant improvement on our last website and supports increased access, navigation, engagement and understanding.

General expectations

- 1.61 We continue to operate a 'no surprises' policy with your office that meets your requirements. We will continue to notify your office when we receive substantive media enquiries.

- 1.62 We remain proactive in our engagement with MBIE as our monitoring agency. This helps to ensure we are meeting the expectations outlined in the *Monitoring arrangements for MBIE-monitored Crown entities*, in line with our enduring output agreement.

Other interests and emerging issues

Cyclone Gabrielle

- 1.63 Following the catastrophic weather events of Cyclone Gabrielle, the Authority has taken steps to alleviate any additional pressure on the electricity sector as industry work to restore power and repair networks. The Authority has released guidance on our compliance approach towards market participants who may be unable to fulfil Code requirements or struggle to meet compliance obligations and has encouraged participants and stakeholders to get in contact with the Authority if they require an extension to submit on consultations.

2022/23 and 2023/24 levy-funded appropriations consultation.

- 1.64 Consultation on the Authority's 2022/23 and 2023/24 levy-funded appropriations closed on 4 November 2022. The Authority provided you with our request for appropriations on 16 February 2023 along with a summary of submissions received.

On 9 March 2023 you agreed to a permanent baseline increase of \$0.500 million for 2022/23 and \$4.600 million for 2023/24 and outyears.

- 1.65 The Authority has committed to a baseline review prior to consulting on funding for the 2024/25 financial year. MBIE is leading the review and has appointed Sapere to undertake the review. The Authority has been supporting Sapere with their information requests. It is expected the review will be completed by the end of June 2023.

Supporting better outcomes for consumers

- 1.66 New Zealand has a competitive retail sector, but the benefits of this are only fully realised by consumers who make sure they are on the best plan for them. The Authority funds Consumer NZ to deliver the Powerswitch comparison and switching website.

s9(2)(b)(ii)

Hedge market enhancements: Further update on ASX access

- 1.67 The ASX futures market provides a tool for New Zealand electricity market participants to manage risk. On 28 October 2022, a Ministerial briefing [BR-22-0051] was provided to you with an update on access restrictions to the ASX futures market.
- 1.68 Access for some New Zealand electricity market participants to New Zealand exchange traded futures on the ASX futures market were restricted from 31 October 2022

onwards. This lack of access is due to the ASX clearing participant Bell Potter exiting a service agreement with Jarden. Jarden provide access to the ASX for approximately 20 percent of New Zealand electricity market participants, who are predominately smaller scale.

- 1.69 The ASX futures market is one of a suite of contract markets that electricity market participants can use to undertake risk management activities. Alternative markets include the financial transmission rights (FTR) market and bilateral trading of risk management products (also known as the OTC market). With reduced access to ASX futures, it is likely that affected participants will increase their use of the FTR and OTC markets. The Authority is committed to ensuring that these markets continue to function efficiently and is currently undertaking enhanced monitoring of the situation.
- 1.70 On 31 October 2022, the Authority made a voluntary request for OTC information from market participants likely to have limited or no access to the ASX futures market. This request was accompanied by an open letter to update the industry on the targeted voluntary information request and provide transparency on the Authority's intentions. The Authority has reviewed the information and will continue enhanced monitoring for as long as necessary, supported by the use of the Authority's statutory information gathering powers.
- 1.71 The Authority is facilitating an industry-led working group to consider whether the efficiency of the OTC market could be improved, and the benefits of making appropriate expectations of the performance of the market and its participants more transparent.
- 1.72 The Authority continues to hold the view that re-instating access to the ASX platform is best facilitated by the ASX, considering the ASX faces strong incentives to maintain an effective market for New Zealand electricity futures. Potential solutions involve the onboarding of new clearing participants and diversifying the existing pool of clearing participants.

Winter 2023

- 1.73 The system operator has expressed concerns about the outlook for Winter 2023. Referring to its *Security of Supply Assessment* published in June 2022, the system operator suggested that under certain scenarios the winter capacity margin could fall under the security standard in the Code as early as 2024. A further market insights report, published in November 2022, expressed concern with the power system's ability to meet winter demand peaks through Winter 2023.
- 1.74 The Authority opened consultation on 25 November 2022 on 11 options to address the Winter 2023 peak demand issue while protecting the long-term interests of consumers. The focus of consultation was on options that are timely, minimise the risk of unintended consequence, provide positive benefits to consumers relative to risks, and support the transition towards a less carbon-intensive future.
- 1.75 Consultation closed on 16 December 2022 and the 29 submissions received have been published on the Authority website.
- 1.76 A Decision paper was published on 9 March 2023. In that paper, the Authority confirmed which options it was progressing for Winter 2023 and which options were being considered as part of the Authority's work programme for potential implementation for Winter 2024.

- 1.77 One option (Option A – improved information regarding headroom in the supply stack) was confirmed for implementation. Four further options are being developed by the system operator and the Authority in parallel with the policy development to ensure implementation can be achieved in time for Winter 2023:
- (a) Option B: Provide forecast spot prices under demand sensitivity cases.
 - (b) Option D: System operator review of wind offers based on external forecast.
 - (c) Option E: Clarify availability and use of ‘discretionary demand’ control (such as ripple control).
 - (d) Option G: Selectively increase existing ancillary service cover at times to offset increased uncertainty in net demand.
- 1.78 After the Decision paper, on 31 March 2023, the Authority decided to implement Options B and D.
- 1.79 The implementation of Option E requires an amendment to the Electricity Industry Participation Code. As such, Authority staff expect to seek a Board decision on the implementation of Options E towards the end of April 2023. Authority staff will update the Board on progress made developing Option G

Ensuring orderly thermal transition

- 1.80 The transition of the electricity system to 100 percent renewable energy generation involves a declining role for thermal baseload generation, but the intermittency of renewable generation means the flexible supply from thermal generators may still be needed during the transition, for peaking and firming purposes.
- 1.81 The Authority has identified some risks that could prevent an orderly thermal transition:
- (1) The commitment risk that slow-start, combined-cycle thermal generators might not be offered when their capacity is needed, because they cannot be started in time, and their start-up costs are not recovered if they are not dispatched.
 - (2) The investment risk that existing thermal units are retired prematurely, when they are still required by the market.
 - (3) The investment risk that if new open-cycle thermal generators are required during the transition, there are insufficient incentives to invest in them.
- 1.82 The commitment risk is being addressed through the *Driving efficient solutions to promote consumer interest through Winter 2023* work by the Authority, covered earlier in this report.
- 1.83 Evaluation of the investment risks will draw on the results of the commissioned quantitative modelling as well as some engagement with thermal generation businesses. The intention is to publish a consultation paper in the first half of 2023.

Security of Supply Forecasting and Information Policy (SOSFIP)

- 1.84 In August 2022, the system operator proposed a replacement SOSFIP incorporating changes from the 2021 dry year event. The proposed SOSFIP contained one change the Authority does not believe is in the long-term benefit of consumers (regarding assessment of electricity demand response in the risk curves) and did not include a

change the Authority believes needs to be included (regarding confidential information). Accordingly, the Authority declined to approve the proposed SOSFIP, and as required by the Code, consulted on the two changes it would like the system operator to make. Consultation closed on 22 November 2022. The Authority has considered submissions and is working with the system operator to finalise and approve a revised SOSFIP.

Review of the forecasting provisions for intermittent generators in the spot market

- 1.85 The Authority has initiated a project to review the forecasting provisions for intermittent generators in the spot market, as indicated in the Authority's forward work programme.
- 1.86 The Authority is concerned that uncertainty in forecasts ahead of real time affects other participants' trust and confidence to make consumption and generation decisions in response to forecast schedules. Adverse consequences for consumers include risks to security of supply and inefficiency (unit commitment regret and higher risk premiums in forward prices).
- 1.87 This work also aligns with suggestions in MDAG's options paper, and recommendations in the Phase 2 review of the 9 August 2021 grid emergency, and ensures regulatory settings are fit for purpose as we transition to a 100 percent renewable electricity system.
- 1.88 The Authority intends to publish an Issues and Options Paper in the first half of 2023 to consult on the problem definition and possible policy solutions.




Review of the Authority's consultation charter and feedback processes

- 1.89 The Authority has reviewed its consultation charter to make the charter more accessible and to specifically include non-industry participants such as small businesses and domestic consumers. The latter is in response to the Authority's additional statutory objective which came into effect in 2022.
- 1.90 While the consultation charter was being reviewed, the Authority has taken the opportunity to review and streamline the Code amendment request process, establish a new advisory group, update the charter and terms of reference for the advisory groups and review the amendment processes for the documents incorporated by reference. Consultation on these closed on 21 March 2023 but was extended to 4 April 2023 for submitters affected by Cyclone Gabrielle.

2 Progress against our Annual Corporate Plan

- 2.1 Our Annual Corporate Plan communicates our intended activities for 2022/23 that will promote our strategic priorities, address regulatory risks and harms, and deliver sector outcomes. It includes the key development projects we have committed to for the 2022/23 financial year.
- 2.2 The Annual Corporate Plan demonstrates how our work supports delivery against our sector ambitions, thriving competition; low-emissions energy; and innovation flourishing.
- 2.3 At the centre of everything we do, and implicit within these activities, are the associated ambitions of consumer centricity and trust and confidence.
- 2.4 The Annual Corporate Plan represents our public commitment to activities for the coming year that we consider will have the most impact and benefit to New Zealanders. It does not represent everything we will do, given the need to respond to emerging risks throughout the year, but serves as a channel to articulate our current priorities and intended targets. The Annual Corporate Plan 2022/23 is available on our website: <https://www.ea.govt.nz/about-us/corporate-documents/>

How we show progress

- 2.5 This section provides a progress update on how the ‘annual focus’ is tracking to achieve the ‘desired outcome’ for each activity area identified in the Annual Corporate Plan, for the four-month period 1 November 2022 to 28 February 2023.
- 2.6 For each activity area, we have provided a summary of the activity’s progress to date against the desired annual outcome. This activity-based reporting provides a greater level of transparency and the opportunity for the Authority to clearly articulate our priorities, their contribution to supporting the Authority to deliver against the sector ambitions, and their intended impact. Where milestones have occurred outside of the four-month period, these have been included for context.
- 2.7 A traffic light system indicates the status of each activity area in terms of achieving the overall 2022/23 desired outcomes of the activity area.
-  The activity area is on track to achieve the annual outcomes.
 -  The activity area is delayed and/or at risk of not achieving the annual outcomes.
 -  The activity area has/will not achieve the annual outcomes.

Low-emissions energy

- Our electricity market settings enable an efficient transition to reliable low-emissions energy in New Zealand.
- Network and market price signals support the lowest overall cost to consumers.

Preparing for a low-carbon future; improving the efficiency of price signals; and ensuring security of supply.

As the regulator of New Zealand's electricity system, our work provides an important platform for the Government's aspirations to achieve 50 percent of all energy consumption coming from renewable sources by 2035, and net zero emissions by 2050. We are working to ensure the transition is as efficient as possible while maintaining energy security, system adaptability, and affordable electricity for consumers. Our activity areas for 2022/23 remain focused on promoting a stable investment environment with robust rules and clear price signals.

The Authority is continuing to progress work in the **preparing for a low-carbon future/supporting New Zealand's transition to low-emissions energy activity area** and has begun implementing phase 3 of the Future security and resilience (FSR) workstream. The Authority is working with the system operator to develop FSR indicators to monitor changes that could affect security and resilience, and to identify issues with Part 8 of the Electricity Industry Participation Code (Code). The Authority is also completing fundamental analysis on future system operation and developing a plan to progress this workstream. The Authority has progressed work to develop high-level options to address risks and opportunities associated with thermal retirement. The Market Development Advisory Group (MDAG) released its options paper *Price discovery in a renewables-based electricity system* on 6 December 2022 and consultation closed on 6 March 2023. Stakeholder submissions and feedback will inform the final options in the MDAG's final recommendations paper. We are continuing work to improve the efficiency of **price signals**:

- a) We have made decisions on three TPM related code amendments.
- b) On 1 November 2022, the Authority achieved a major milestone with the implementation of real time pricing (RTP).
- c) The Authority has prepared for distributors' pricing methodologies, which are published in late March 2023. The Authority expects scorecard assessments will be published in August 2023.

We are continuing our work to ensure the electricity sector manages **security of supply** effectively. The system operator has started collecting individual transition plans from North Island distributors for the extended reserves project. The Authority published a consultation paper on the Security of Supply Forecasting and Information Policy (SOSFIP) on 8 November 2022. Consultation closed on 22 November 2022 and submissions have been considered. The Authority is working with the system operator to finalise the policy.

2022/23 Activities | Low-emissions energy

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Preparing for a low-carbon future / Supporting New Zealand's transition to low-emissions energy:</p> <p>The power system is expected to undergo significant change in the future as new technology is introduced / existing technology retires. More generation capacity will be needed as part of the electrification of the economy – meaning more investment, predominantly in renewable energy, such as wind, solar, hydro and geothermal, and new technologies such as batteries.</p>	<ul style="list-style-type: none"> ▪ FSR phase 3 year 1 <ul style="list-style-type: none"> ○ Review Part 8 of the Code to ensure relevance for new technology, including identifying the standards new technology needs to support the reliability of the power system. ▪ Managing risks of transition <ul style="list-style-type: none"> ○ Identify key triggers when thermal retirement might occur and options to address. ▪ Examining wholesale market operation under 100% renewables (MDAG): <ul style="list-style-type: none"> ○ Support MDAG's delivery and publication of options paper and recommendations to the Authority. ○ Begin considering MDAG's recommendations. 	<ul style="list-style-type: none"> ▪ Implementation of phase 3 of the FSR programme underway, with initial policy decisions made. ▪ Complete identification of options to address thermal retirement risks. ▪ Consideration of MDAG recommendations underway. 	<ul style="list-style-type: none"> ● The Authority is progressing implementation of phase 3 of the FSR project through three workstreams: <ol style="list-style-type: none"> a) FSR indicators – the Authority is working with the system operator to develop indicators to monitor changes that could affect security and resilience. The Authority plans to publish the dashboard of indicators in the first half of 2023. b) Review Part 8 of the Code – the Authority has worked with the system operator to identify issues with Part 8 of the Code. The Authority published an issues paper for consultation on 4th April 2023. Consultation closes on 30th May 2023. c) Future system operation – the Authority is completing fundamental analysis on future system operation and developing a plan to progress this workstream. ▪ The Authority has progressed work to investigate the risks associated with the early retirement of thermal plant, risks associated with delayed new investment, and is developing high level options to address these risks and opportunities. ▪ The MDAG released its options paper <i>Price discovery in a renewables-based electricity system</i> on 6 December 2022. The Authority and the MDAG organised several engagement opportunities across the consultation period which closed on 6 March 2023. Stakeholder submissions and feedback will inform the options in the MDAG's final recommendations paper.

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Price signals: Improving the efficiency of transmission and distribution pricing to send better signals to consumers about the cost of using these networks and promote more efficient investment in DER and networks.</p>	<ul style="list-style-type: none"> ▪ TPM <ul style="list-style-type: none"> ○ Support Transpower's implementation of the new Transmission Pricing Methodology (TPM) on 1 April 2023. ○ Ensure necessary TPM-related Code amendments are in place by 1 April 2023. ▪ RTP ready to go live in Q1-2 2022/23. ▪ Distribution pricing reform <ul style="list-style-type: none"> ○ Assess and address any pricing issues for new and expanded connections. ○ Support distributors with pass-through of new transmission pricing to distribution pricing. ○ Progress analysis of possible regulatory options to drive faster reform. 	<ul style="list-style-type: none"> ▪ The new TPM and related Code amendments implemented by 1 April 2023. ▪ RTP live by Q2 2022/23. ▪ Pass-through of new transmission pricing is consistent with incentives in the TPM. 	<ul style="list-style-type: none"> ▪ The Authority has made decisions on three TPM-related Code amendments: <ol style="list-style-type: none"> a) The Authority published a decision paper on 15 November 2022 which outlines our decision to amend the Code to provide for the development of a new Settlement Residual Pricing Methodology (SRAM). b) The Authority published a decision paper on 22 November 2022 which outlines our decision to amend the Code to address various technical issues in the TPM identified by stakeholders. c) The Authority published a decision paper on 13 December 2022 which outlines our decision to amend the Code to remove the requirement for distributors to make Avoided Cost of Transmission (ACOT) payments to distributed generators. ▪ RTP successfully went live on 1 November 2022. ▪ The Authority has prepared for distributors' pricing methodologies which are published in late March 2023. The Authority expects scorecard assessments will be published in August 2023.

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Security of supply: Ensuring the electricity sector manages security of supply effectively.</p>	<ul style="list-style-type: none"> ▪ Extended reserves <ul style="list-style-type: none"> ○ Agree the analysis and implementation work to be undertaken by the system operator. ○ Support system operator with the management and coordination plan for the automatic under-frequency load shedding (AUFLS) providers' transition to the 4-block AUFLS scheme. ▪ Security of supply settings <ul style="list-style-type: none"> ○ Progress the Code amendment to adopt the system operator's updated security of supply policy. 	<p>Policy decisions made and implementation underway.</p>	<ul style="list-style-type: none"> ● ▪ Extended reserves <ul style="list-style-type: none"> ○ The system operator has started collecting individual transition plans from North Island distributors. This information will allow the system operator to model the transition in their security tools and support distributors in making the transition to the 4-block AUFLS scheme. ▪ Security of supply settings <ul style="list-style-type: none"> ○ The Authority released a consultation paper on proposed changes to the SOSFIP. Consultation closed on 22 November 2022. The Authority has considered submissions and is working with the system operator to finalise and approve a revised SOSFIP.

Thriving competition

- New entrants can compete on a level playing field with established participants.
- Market settings enable competition between DER's and established technology solutions.

Ensuring competition in electricity markets; monitoring market activities; ensuring confidence through monitoring, intervention and enforcement; and reducing energy hardship through improved consumer care.

Market competition is a key enabler to deliver a better energy future – driving progress, affordability, efficiency and valuable outcomes for New Zealand.

Competition helps ensure New Zealanders have plenty of choice about how they get and use electricity and improves their access to competitive pricing. We encourage participation and reinforce competition in traditional and emerging markets by putting in place the mechanisms needed to maintain a level playing field – while also considering the long-term opportunities that will lead to better outcomes for consumers.

Our 2022/23 activity areas seek to support and strengthen competition and confidence in electricity markets.

Strengthening competition in the wholesale market is a priority for the Authority. For the activity area ***ensuring competition in electricity markets***, the Authority received 32 submissions on its Issues Paper on wholesale market competition. Decisions are expected to be published in May 2023. In October 2022, we published an issues paper on wholesale market competition and expect to decide next steps in May 2023. The Authority is working on a decision paper for the FTR market review. We are also proposing to release a separate consultation paper on market conduct, as well as publishing further pricing information about the market in the form of the geographic visualisation of FTR obligations.

The Authority continues to ***monitor market activities and outcomes*** to lift the level of transparency for participants through reporting improvements, and by broadening the scope of our monitoring following a focus on the wholesale market. Improvements include publishing indicators (as used and signalled in the post implementation review of trading conduct provisions) as part of the quarterly report that covers the final quarter of 2022. We have also developed a new product 'eye on electricity', for a non-expert audience, and are working on a consultation paper about expanding and streamlining our retail monitoring, to be published in the first half of 2023.

To support thriving competition, New Zealand need a stable regulatory environment where participants are held to account to rules designed to provide long-term benefits. In our activity area ***confidence in the Authority's role as a regulator*** we have implemented our *Compliance Strategy* and are continuing to implement our *Compliance Monitoring Framework* to drive more timely and robust decision-making on enforcement cases. The Authority has updated its strategy and framework to reflect the passing of the Electricity Industry Amendment Act 2022. One compliance case study has been published this year.

2022/23 Activities | *Thriving competition*

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Ensuring competition in electricity markets: Market competition is a key enabler to deliver a better energy future. We're committed to supporting and strengthening competition in electricity markets.</p>	<ul style="list-style-type: none"> ▪ Wholesale market competition review <ul style="list-style-type: none"> ○ Complete implementation of possible remedies to inefficient price discrimination. ○ Continued prioritisation and initiation of workstreams to address focus areas identified in the Monitoring Review of structure, conduct, and performance in the wholesale electricity market review paper. ▪ Improve risk management settings <ul style="list-style-type: none"> ○ Implement commercial market making – commercial 'go live' of market making by Q2 2022/23. ○ Consult on potential enhancements to FTR markets. 	<p>Policy decisions are made and implemented, with the next prioritised Wholesale Market Review workstream underway.</p>	<ul style="list-style-type: none"> ▪ The Authority received 32 submissions on its Issues Paper on wholesale market competition. Decisions are expected to be published in May 2023. ▪ The commercial market making contract went 'live' in Q2 of FY22/23. ▪ The Authority is working on a decision paper for the FTR market review. We are also proposing to release a separate consultation paper on market conduct, as well as publishing further pricing information about the market in the form of the geographic visualisation of FTR obligations.
<p>Increasing monitoring of market activities and outcomes: Proactively monitoring market activities to ensure the market is appropriately responding to challenges such as dry years, fuel shortages and major outages, enabling new technology and innovation, and increased investment in renewables.</p>	<ul style="list-style-type: none"> ▪ Continue to improve our trading conduct monitoring and improving the level of transparency of this work by including commentary in our quarterly monitoring report. ▪ Broaden the scope of our monitoring after a recent focus on the wholesale market <ul style="list-style-type: none"> ○ Undertake initial work on the consumer care guidelines information disclosure which is due to be provided to the Authority by 31 July 2022. 	<p>Monitoring of market activities is continuously improved, increasing transparency, trust and confidence.</p>	<ul style="list-style-type: none"> ▪ The Authority will publish indicators (as used and signalled in the post implementation review of trading conduct provisions) in every second quarterly report starting in the final quarter of 2022 (to be published in 2023). ▪ The Authority has developed a new product ('eye on electricity') for a non-expert audience and has published 12 of these since 1 July 2022. We have met with stakeholders to discuss how we monitor trading conduct. ▪ The Authority is developing a consultation paper on expanding and streamlining our retail monitoring. The paper is due to be published in the first half of 2023.

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Confidence in the Authority's role as regulator: Ensuring confidence in the Authority's role as regulator, through education, monitoring, intervention, and enforcement.</p>	<ul style="list-style-type: none"> ▪ Complete implementation of the <i>Compliance Strategy</i>. ▪ Continued implementation of the <i>Compliance Monitoring Framework</i>, including initiating proactive monitoring and compliance activities. ▪ Drive more timely and robust decision-making on enforcement cases through process improvements and raising capability. ▪ Publish recent case studies and reports to industry on trends and outcomes from compliance processes. 	<ul style="list-style-type: none"> ▪ The <i>Compliance Strategy</i> and <i>Compliance Monitoring Framework</i> are fully implemented. ▪ The Authority's education programme is established to implement the VADE (Voluntary, Assisted, Directed and Enforced) compliance operating model. 	<ul style="list-style-type: none"> ▪ The <i>Compliance Strategy</i> and <i>Compliance Monitoring Framework</i> documents were updated to reflect the passing of the Electricity Industry Amendment Act 2022 and published in December 2022. ▪ Implementation of the <i>Compliance Strategy</i> is complete. Implementation of the <i>Compliance Monitoring Framework</i> will continue into 2023/24. Implementation is underway for several of the high-risk areas for proactive monitoring. Some areas require further methodology to be developed, and this work is underway. ▪ In January 2023 the Authority published one compliance case study. Another case study was drafted, but after consulting with the participant involved, a decision was made not to publish it. ▪ The education programme is being developed to implement the VADE compliance operating model.

Innovation flourishing

- The regulatory system accommodates new business models.
- The availability and transparency of industry data is continuously improved.

Ensuring market settings are conducive to innovation and industry success; utilising data transparency, insights and automation; meeting our obligations under the Electricity Industry Amendment Act 2022.

We want to empower consumers to benefit from new and emerging technologies in distributed energy by enabling healthy investment and increased innovation to ensure that distribution networks are fit for the future and supportive of competition. This will lead to more choice, lower electricity prices, and better value for consumers in the long term.

The transition to low-emissions energy will require large scale and high paced innovation changes. We will reflect this by being proactive, agile, and forward-looking in our regulatory approach. Through the activity area **settings are conducive to innovation and industry success**, we are continuing our work to update the regulatory settings for distribution networks to enable innovation and competition to support the transition. The Authority released an issues paper *Updating the Regulatory Settings for Distribution Networks* on 20 December 2022. We are on track to develop a prioritised list of issues to be progressed over the next 18 months to two years, with some high-priority tasks to begin in the current year.

The **data transparency, insights, and automation** activity area focuses on continuously improving the availability of data to deliver sophisticated and transparent insights in a timely manner. We have automated processes to support our monitoring function and made improvements to our data storage. Work aligning the Authority's vectorised Scheduling Pricing and Dispatch (vSPD) with the system operators Scheduling, Pricing and Dispatch (SPD) before, during and following the introduction of RTP, is almost complete.

The **Electricity Industry Amendment Act 2022** was enacted on 31 August 2022. The Authority developed an implementation programme to address changes required because of the Act. Many aspects of this programme are now complete, with longer term work now part of the Authority's business-as-usual activities.

2022/23 Activities | *Innovation flourishing*

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Settings are conducive to innovation and industry success: Ensuring market settings are conducive to innovation and industry success through a proactive, agile, and forward-looking regulatory approach.</p>	<ul style="list-style-type: none"> ▪ Updating the regulatory settings for distribution networks <ul style="list-style-type: none"> ○ Continue programme to identify issues affecting the distribution sector and options to address the issues. ○ Identify preferred options based on urgency, value, ability to implement and net benefit to consumers. ○ Progress the open networks development programme. 	<p>A package of preferred options is ready for implementation.</p>	<ul style="list-style-type: none"> ● The Authority released an issues paper <i>Updating the Regulatory Settings for Distribution Networks</i> on 20 December 2022. Consultation closed on 28 February 2023, however, it was extended for submitters to 14 March 2023, reflecting the resource pressure created by Cyclone Gabrielle. We are on track to develop a prioritised list of well-understood issues to be progressed over the next 18 months to two years, with some high-priority tasks to begin in the current year.
<p>Data transparency, insights, and automation: Continuously improving the availability of data to deliver sophisticated and transparent insights in a timely manner.</p>	<ul style="list-style-type: none"> ▪ Reformulate data models to apply and deliver insights in a timely manner <ul style="list-style-type: none"> ○ Automate the Jade model to update data monthly. ○ Update the vSPD model for RTP implementation, to support alignment with the increased number of datasets in system operator's SPD. ▪ Continued cost optimisation and process improvements <ul style="list-style-type: none"> ○ Improving data governance, structures and oversight through data cataloguing, documentation, and awareness across the Authority. 	<p>Models and processes will be continuously improved to deliver increased automation, more timely insights, and greater transparency.</p>	<ul style="list-style-type: none"> ● <ul style="list-style-type: none"> ▪ The weekly running of the Jade model to support trading conduct monitoring has now been fully automated. ▪ Several new tables have been provisioned in the Delta Lakehouse since November 2022 to support the work of Monitoring and Compliance, most notably those having to do with RTP and the de-anonymized orders and trades on the ASX of New Zealand electricity futures and options. ▪ The process of transforming and enriching data made available via the Delta Lakehouse continues to be migrated at pace into our improved and standardised framework. This framework was developed to align with our data governance approach. ▪ Work aligning vSPD with SPD before, during and following the introduction of RTP is almost complete. The formulation documents for the final phase of RTP (dispatchable demand) to be deployed in April 2023 have been received (as of 3 March 2023) and the work to implement these changes is underway.

Activity Area	Annual focus	22/23 desired outcome	Progress at 28 February 2023
<p>Electricity Industry Amendment Bill: Ensuring the Authority meets our obligations under the Electricity Industry Amendment Bill when it comes into effect.</p>	<ul style="list-style-type: none"> ▪ Identify the changes required for the Authority to comply with the Electricity Industry Amendment Bill when it comes into effect. ▪ Establish an implementation plan to address required changes. 	<p>Implementation of required changes is underway.</p>	<p>● The Electricity Industry Amendment Act 2022 was enacted on 31 August 2022. The Authority developed an implementation programme to address changes required because of it. Many aspects of this are now complete such as legal analysis of how the changes affect the Authority; incorporating the new Part 6A into the Code; and updates to policies, procedures, guidelines, and web content to ensure alignment with the Act. Longer-term work, such as considering updates of the arms-length rules and implementing changes to the <i>Compliance Monitoring Framework</i>, is being transferred from the implementation project team into business-as-usual for the relevant business units.</p>

3 Output performance

- 3.1. This section provides an exceptions report against the performance measures in our Statement of Performance Expectations (SPE) 2022/23. For the descriptions of the outputs please see the [SPE](#).

Electricity Industry Governance and Market Operations

- 3.2. The Electricity Industry Governance and Market Operations appropriation funds the Authority's operations, including Board members' costs, the Rulings Panel, the Security and Reliability Council, advisory groups, and the operation of the electricity system and market, enabling us to exercise our main functions:
- a) **Promote market development:** we promote market development of the electricity markets by making amendments to the Code and through market facilitation measures.
 - b) **Monitor, inform and educate:** we monitor market behaviour, make data, information and tools available, and educate consumers and participants.
 - c) **Operate the electricity system and markets:** we are responsible for the day-to-day operation of the electricity system and markets, delivered through contracts with service providers.
 - d) **Enforce compliance:** we monitor, investigate, and enforce compliance with the Act, relevant regulations, and the Code.
- 3.3. Performance measures and targets relating to the exercise of these functions are set out in the SPE and reported in the Annual Report. Consistent with our output agreement, four-month reporting on our output performance is currently provided on an exceptions basis.
- 3.4. The Electricity Industry Amendment Act 2022 introduced a new function to **Protect the interests of small electricity consumers**. We are currently implementing this function, which includes developing new performance measures and targets that will be included in the SPE 2023/24 and reported on in the new financial year.

Performance at 28 February

- 3.5. As at 28 February 2023, 11 output performance measures were on track two performance measures were not on track. Details of the performance measure targets that are not on track or are at risk of not being met is provided below.

Function	Measure	Target	Status at 28 February 2023
Enforce compliance	Percentage of investigations decided within 12 months of the investigation being opened	100 percent.	● This measure is substantially achieved ¹ and sits at 98.4 percent (122/124 cases).
Monitor, inform, and educate	Data and analytical tools are made available to support the Authority's decision-making processes	Increase on prior year.	● At risk of not achieving an annual increase. The 2021/22 baseline number is atypical because tables were created as part of the data migration to Databricks/Delta. The Authority does not anticipate the number of new data and analytical tools will be as high each year going forward.

Percentage of investigations decided within 12 months

Performance measure methodology

- 1.1. The methodology used to calculate this measure excludes cases that were already older than 12 months at 1 July 2022.
- 1.2. During the reporting period (1 July 2022 to 28 February 2023) 136 cases were closed. Of these closed cases, 14 were older than 12 months in the 2022/23 financial year. Of the 14 cases, 13 were already older than 12 months at the start of the 2022/23 financial year and as such are out of scope for this measure. This means only one case **closed** in this reporting period exceeded 12-month target.
- 1.3. Additionally, the Authority's Compliance team has one case that has **exceeded 12 months but is still under investigation**. This open case also counts towards this measure.
- 1.4. That brings the total number of cases that exceed the 12-month target to **two out of 124 total** closed and open cases in scope (136 closed, less the 13 out of scope cases, plus one open case).
- 1.5. In comparison, for the same reporting period last year (1 July 2021 to 28 February 2022), the Authority closed 85 cases, and had four cases exceed the 12-month target (i.e. 95 percent of investigations were decided within 12 months).

¹ From the 2022/23 financial year onwards, the Authority reports on all output measures that are within five percent of meeting its target as 'substantially achieved'.

Ongoing improvements being made

- 1.6. The Authority has taken steps to improve performance and timeliness in this area including:
- a) active management of investigator workload
 - b) regular internal reporting of open and closed cases
 - c) bundling of cases – historically the Authority processed each case individually, now we look to bundle multiple alleged breaches against a participant into one enquiry
 - d) the Authority’s Compliance team now having a full complement of staff FTE
 - e) cases have been distributed across the Authority’s compliance team – not just investigators, but compliance advisors assisting with cases too
 - f) triaging of incoming notifications.
- 1.7. The Authority is looking to implement the following initiatives to further improve performance and timeliness:
- a) Consideration of a ‘fast track’ referral process to the Rulings Panel.
 - b) Team approach to investigations, i.e. multiple investigators working on one case.

Data and analytical tools made available

- 1.8. This is a new measure for the 2022/23 financial year that the Authority baselined in the Annual Report 2021/22. In the 2021/22 financial year, 38 items of data or analytical tools were made available to support the Authority’s decision-making processes. The 2021/22 baseline number is atypical because tables were created as part of the data migration to Databricks/Delta. The Authority does not anticipate the number of new data and analytical tools will be as high each year going forward. This measure is part of a suite of measures to monitor market behaviour, make data, information and tools available, and education consumers and participants. The other measures in this suite are on track.

Managing the Security of New Zealand’s Electricity Supply

- 3.6. This appropriation is intended to achieve enhanced security of supply in the electricity system during periods of emerging or actual security situations. The system operator can request funding from this appropriation to manage actual or emerging emergency events relating to the security of New Zealand’s electricity supply, to:
- a) increase monitoring and management responsibilities in the event of an emerging or actual security situation
 - b) plan and run an official conservation campaign.
- 3.7. Our role in respect to this appropriation is limited to addressing requests from the system operator to use these funds, which are subject to an agreed process and criteria.
- 3.8. There has been no expenditure in respect to this appropriation in the year-to-date.

Electricity Litigation Fund

- 3.9. This appropriation is intended to ensure the Authority can participate in litigation effectively and without delay. Our functions under this appropriation include defending cases against the Authority and taking enforcement action under our enforcing compliance function. The Authority’s access to this appropriation must be consistent with the criteria of use documented in the output agreement.

- 3.10. The litigation fund performance measure is on track. At 28 February 2023, \$0.372 million has been spent primarily on the TPM litigation and the appeal of the Authority's decision on the UTS investigation arising from the 9 August 2021 event.

4 Organisational development

- 4.1. Following a robust recruitment process that including extensive international research into suitable candidates, Sarah Gillies was appointed as the new Chief Executive, effective from 9 January 2023. Sarah was previously the Authority's General Manager, Legal, Monitoring and Compliance, and recruitment is underway to fill that position.
- 4.2. For the four-month period 1 November 2022 to 28 February 2023, the Authority had a turnover rate of nine percent. The Authority works hard to manage staff retention and attract the right talent to our team. Staff engagement is ahead of the public sector average and has increased year-on-year. During the four-month period, the Authority:
 - a) ran a series of focus groups, with over 80 percent staff involvement, to determine a set of organisational behaviours reflecting how the Authority lives its values
 - b) ran a series of workshops as an opportunity to put the behaviours into practice, bringing the values to life in a practical, meaningful way and to support and embed a strong, engaged culture at the Authority.
- 4.3. The Authority continues to recruit and retain staff in New Zealand's tight labour market with unemployment hitting an all-time low. While the market for all roles is challenging, the greatest challenge remains in areas where the Authority competes for candidates in specialist roles. The Authority has refined its Employee Value Proposition with targeted use of social media to raise our desirability as an employer. We have embedded strategies such as internal promotion, progression pathways, movement across disciplines, and attracting juniors into developmental roles into our organisational development practices. The Authority is now an accredited employer able to support applications from skilled candidates with visa conditions.
- 4.4. The Authority considers continuous improvement in addressing staff wellness as integral to its health, safety and wellness strategy. The Health, Safety and Wellbeing Committee includes representation from the Senior Leadership Team and employee representation from across the organisation. Online safety training is made available to ensure current understanding of the Safety at Work Act and key responsibilities. Wellness initiatives over the last four months include signing up to Pride Pledge as part of diversity and inclusion; acknowledging Waitangi Day; running activities and end of month awards for Fitness February; and changing our EAP service provider.
- 4.5. In the Ask Your Team engagement surveys of 2021 and 2022, staff declared the desire to be included in the development of people-focused solutions to areas of improvement. In line with this, the Authority has completed a series of focus groups to determine where we could improve our project management approach and practices for greater efficiencies.

Board membership

- 4.6. In January 2023, the Authority welcomed two new Board members, Paula Rose and Erik Westergaard. Both members have been appointed for five-year terms which commenced on 16 January 2023.
- 4.7. Sandra Gamble resigned from the Authority Board at the end of 2022. Mark Sandelin resigned from the Board at the end of March 2023.
- 4.8. Following these changes, the Board has reconsidered the membership of its committees. The committees are an important part of the Board's role and vary from oversight to decision making.

- 4.9 MBIE runs the Board recruitment process. The Authority is in regular contact with MBIE regarding the finalisation of arrangements for existing Board members.

5 Financial performance

- 5.1 This section provides information about the financial performance relating to the period 1 November 2022 to 28 February 2023.

Expenditure

- 5.2 The following table details expenditure incurred against the three appropriations available to the Authority:

Appropriation	Feb 2023	Feb 2023	Feb 2023	Jun 2023
	Year to Date Actual \$000	Year to Date Budget \$000	Year to Date Variance \$000	Full Year Budget \$000 *
Electricity industry governance and market operations	57,779	64,148	6,369	97,154
Managing the security of New Zealand's electricity supply	-	-	-	-
Electricity litigation fund	372	482	110	1,500
Total	58,151	64,630	6,479	98,654

*An in-principle expense transfer for the GMO from 2021/22 to 2022/23 of \$1.702 million was confirmed at the October 2022 baseline update.

- 5.3 In the Electricity Industry Governance and Market Operations appropriation, which is the Authority's main operational appropriation, expenditure for the eight months to 28 February 2023 was \$6.479 million lower than budget.

- 5.4 This was mainly due to:

- costs related to market-making of \$4.077 million which was budgeted to start July 2022 but started in September 2022 due to ongoing negotiations
- salary costs of \$0.341 million due to vacancies (budget set in April 2022 assumed recruitment completed by June 2022, however current market conditions have proved recruitment to be difficult)
- Other expenses are favourable by \$2.737 million related to changes in scope and timing of various projects since the budget was set

- 5.5 The Managing the Security of New Zealand's Electricity Supply appropriation is contingent in nature and not routinely used — its use is limited to the management by the system operator (Transpower) of actual or emerging events relating to the security of New Zealand's electricity supply.

- 5.6 The Authority has not received any requests for funding from the system operator to use the Managing the Security of New Zealand's Electricity Supply appropriation.

- 5.7 The Electricity Litigation Fund appropriation is also contingent in nature and is only utilised where certain events or situations arise. At 28 February 2023, \$0.372 million has been spent primarily on the TPM litigation and the UTS that came out of the 9 August 2021 event. The Electricity Litigation Fund has an appropriation of \$1.500 million.

Revenue

- 5.8 Revenue for the period ended 28 February 2023 is detailed in the Statement of comprehensive revenue and expenditure (Figure 1). Total Authority expenditure year-to-date is \$58.151 million funded by Crown appropriations.

Figure 1: Statement of comprehensive revenue and expenditure - 1 July 2022 to 28 February 2023

2021/22 Full Year Actual \$000		Feb 2023 Year to Date Actual \$000	Feb 2023 Year to Date Budget \$000
77,504	Crown appropriations	58,151	64,630
154	Interest income	580	87
-	Other income	-	-
77,658	Total revenue	58,731	64,717
14,800	Personnel costs	9,906	10,247
1,351	Depreciation and amortisation	990	1,408
48,096	Service provider contracts	40,055	42,538
13,257	Other expenses	7,200	10,437
77,504	Total expenditure	58,151	64,630
154	Total comprehensive revenue	580	87

Figure 2: Statement of changes in equity - 1 July 2022 to 28 February 2023

2021/22 Full Year Actual \$000		Feb 2023 Year to Date Actual \$000	Feb 2023 Year to Date Budget \$000
12,814	Opening balance	12,968	13,950
154	Total comprehensive revenue	580	87
12,968	Closing balance	13,548	14,037

Financial position

- 5.9 The Authority's assets and liabilities are detailed in the Statement of financial position (Figure 3). Unspent appropriation funding is held in short-term deposits. As at 28 February 2023, the Authority's \$18.128 million balance of cash and cash equivalents is comprised of a current account balance of \$0.428 million, an interest earning money market account balance of \$2.200 million, and term deposits of \$15.500 million, all held with Westpac. \$14.049 million is required to settle the Authority's current liabilities.

Figure 3: Statement of financial position - As at 28 February 2023

2021/22 Full Year Actual \$000		Feb 2023 Year to Date Actual \$000	Feb 2023 Year to Date Budget \$000
Assets			
Current assets			
18,661	Cash and cash equivalents	18,128	20,033
944	Receivables and prepayments	290	290
-	GST receivable	-	-
19,605	Total current assets	18,418	20,323
Non-current assets			
1,136	Property, plant and equipment	2,134	2,194
6,901	Intangible assets	7,262	7,362
8,037	Total non-current assets	9,396	9,556
27,642	Total assets	27,814	29,879
Liabilities			
Current liabilities			
6,911	Payables and accruals	8,061	13,585
1,224	Employee entitlements	647	1,390
442	GST payable	140	847
5,670	Appropriation repayable to the Crown	5,201	-
305	Other provisions	-	-
14,552	Total current liabilities	14,049	15,822
Non-current liabilities			
20	Employee entitlements	20	20
102	Other provisions	197	-
122	Total non-current liabilities	217	20
14,674	Total liabilities	14,266	15,842
12,968	Net assets	13,548	14,037
Equity			
9,011	Contributed capital	9,011	9,011
3,957	Accumulated surplus/(deficit)	4,537	5,026
12,968	Taxpayers' funds	13,548	14,037

Figure 4: Statement of cash flows - 1 July 2022 to 28 February 2023

2021/22 Full Year Actual \$000		Feb 2023 Year to Date Actual \$000	Feb 2023 Year to Date Budget \$000
Cash flows from operating activities			
83,174	Receipts from the Crown	63,351	65,009
154	Interest from investments	579	87
(644)	Repayment of appropriation to the Crown	-	-
0	Distribution of net spot revenue to levy payers	95	-
(63,487)	Payments to suppliers	(45,754)	(45,958)
(14,386)	Payments to personnel	(10,484)	(9,837)
501	Goods and services tax (net)	(301)	747
5,312	Net cash flows from operating activities	7,486	10,048
Cash flows from investing activities			
-	Receipts from the sale of fixed assets	-	-
(1,078)	Purchase of property, plant and equipment	(1,068)	(2,002)
(2,656)	Purchase of intangibles	(1,281)	(3,493)
(3,734)	Net cash flows from investing activities	(2,349)	(5,495)
Cash flows from financing activities			
0	Repayment of appropriation to the Crown	(5,670)	
1,578	Net increase/(decrease) in cash and equivalents	(533)	4,553
17,083	Cash and cash equivalents at beginning of year	18,661	15,480
18,661	Cash and cash equivalents at end of period	18,128	20,033

6 Audit and Risk

- 6.1. This part of the report provides information about audit and risk matters relating to the period as specified in the output agreement.

Audit issues

- 6.2. The statutory audit has been completed with no control issues highlighted and an unmodified audit opinion provided by Audit NZ.
- 6.3. Three internal audit reviews were completed during the period in the areas of: Schedule 2 Delegations, Suspicious Transactions and Cyber Security Review. No material findings were reported, and remedial action plans have been formulated and are being implemented for minor suggestions.
- 6.4. The Information Management Action Plan has been submitted to Archives New Zealand following the review undertaken during 2022. There are plans that outline the actions that will be taken over the next two years to lift the maturity of the Authority in respect to information management. The progress will be reported back to the SLT on a regular basis.

Risk management

- 6.5. The risks identified in this report reflect wider system risks, in which we have a key role to monitor and mitigate as kaitiaki of the electricity sector. New Zealand is grappling with the goal to reduce carbon emissions, and the Climate Change Commission's final advice points to increased reliance by consumers and the economy on electricity.
- 6.6. Strategy and risk operate in unison, hence there is strong alignment between the components of our strategy and the key risks we have identified. We have indicated the linkages to our strategy in connection with each of the risks reported. No new system wide risks have been identified during the period.
- 6.7. Risks have been rated using a qualitative approach, according to their current state in terms of likelihood and consequence, resulting in an overall rating. The overall rating therefore reflects the residual risk, post mitigation, and assuming the implemented mitigations are operating effectively.
- 6.8. In relation to each risk there is a programme of mitigations/controls which are underway or planned. The mitigations are targeted to drive a reduction in the likelihood of the risk occurring and/or the consequences should the risk eventuate.
- 6.9. Only one risk rating has changed and that is the "Staff capability and capacity" which has gone up from "High" to "Critical". This rating has been revised up since the last reporting period due to the employment market and staff turnover during the period. The Authority has an ongoing recruitment programme to ensure we have the capability and capability to operate at full performance. We are also focusing on retention by investing in our people leadership and management capabilities and improving our workplace culture.

Risk Level	Management Approach
Critical Risk score: >13.5 – 25.0	Immediate action required; risk escalated as appropriate. Action plans and management responsibility specified with close scrutiny required. Only the Board and the Chief Executive can accept this level of risk.
High Risk score: >7.0 – 13.5	Senior leadership team advised. Action plans and management responsibility specified with periodic scrutiny required. The Chief Executive and General Manager or programme/project sponsor can accept this level of risk.
Medium Risk score: >3.0 – 7.0	Management responsibility specified. Managed by specific monitoring and procedures. The relevant project/programme or third tier manager or business manager can accept this level of risk.
Low Risk score: 0.25 – 3.0	Manage by routine procedures. Unlikely to require specific application of resources. The relevant team leader or fourth tier manager can accept this level of risk.

Risk description and mitigations	Previous rating	Current rating
<p>Infrastructure investment: If there is underinvestment in infrastructure, or investment does not keep pace with the demand for new generation in the move toward decarbonisation and/or decentralisation then this is likely to result in reduced reliability of the network, high prices, conservation campaigns and market intervention.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Monitoring and regular reporting to management, Board, and Security and Reliability Council (SRC). ▪ Regular inter-agency meetings between the Authority, MBIE and Transpower to discuss the current status and any change to reporting/monitoring needed. ▪ Range of security of supply measures, triggered from the energy risk curves (ERCs), including official conservation campaigns, customer compensation scheme and planned load shedding. ▪ Regularly review market settings to ensure supply and investment is encouraged. ▪ Review market settings and processes to reflect lessons from the 2021 dry year. ▪ The phase one review of the systems and procedures that contributed to the scarcity pricing event of 9 August 2021 has been completed, and recommendations have been accepted by Transpower for implementation. ▪ Phase two review of the wider issues from the 9 August 2021 event has been completed and published and provides new observations and recommendations aimed at creating enduring, and widespread, system improvements to the management of future events. ▪ Consider which proposed actions to promote more and faster generation investment, as identified through the Wholesale Market Review, to take forward following consultation on the 2022 Issues paper. ▪ Explore options to reduce dependency on voluntary disclosure of gas positions and conditions by non-participants in the electricity sector. ▪ Integration of management of security of supply risks in transition to 100 percent renewables. ▪ At the time a medium-term supply reduction is signalled undertake market facilitation through direct stakeholder interaction. ▪ Consider what actions are open to the Authority, including changes to the wholesale market (either Code amendments or market facilitation) to encourage more investment in the long term. ▪ Consider if short-term changes are needed to incentivise/increase current supply. ▪ Policy settings for an enhanced automatic under-frequency load shedding scheme have been published. Monitoring the system operator's implementation progress with North Island distributors through to July 2025 deadline. ▪ Improve settings and support more demand side participation and ensure demand side response is a feature of security of supply settings. ▪ Consider industry-led proposals for additional ancillary products. ▪ Understand and as appropriate ensure correct settings to encourage commercial arrangements to provide for demand-side response, with a focus on large industrial load. <p>Strategic linkage(s): <i>Ambitions:</i> Low-emissions energy; Trust and confidence; Innovation flourishing <i>Capabilities:</i> Purposeful connection; Transformative mindset; Impactful delivery</p>		

Risk description and mitigations	Previous rating	Current rating
<p>Short-term supply-side issue</p> <p>If there is a short-term supply-side issue, (outage, dry year, fuel unavailability) this may lead to energy shortages.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Monitoring and regular reporting to management, Board, and Security and Reliability Council (SRC). ▪ Regular inter-agency meetings between the Authority, MBIE and Transpower to discuss the current status and any change to reporting/monitoring needed. ▪ Range of security of supply measures, triggered from the energy risk curves (ERCs), including official conservation campaigns, customer compensation scheme and planned load shedding. ▪ Regularly review market settings to ensure supply and investment is encouraged. ▪ Review market settings and processes to reflect lessons from the 2021 dry year. ▪ The phase one review of the systems and procedures that contributed to the scarcity pricing event of 9 August 2021 has been completed, and recommendations have been accepted by Transpower for implementation. ▪ Phase two review of the wider issues from the 9 August 2021 event has been completed and published and provides new observations and recommendations aimed at creating enduring, and widespread, system improvements to the management of future events. ▪ Explore options to reduce dependency on voluntary disclosure of gas positions and conditions by non-participants in the electricity sector. ▪ Integration of management of security of supply risks in transition to 100 percent renewables. ▪ At the time a medium-term supply reduction is signalled undertake market facilitation through direct stakeholder interaction. ▪ Consider what actions are open to the Authority, including changes to the wholesale market (either Code amendments or market facilitation) to encourage more investment in the long term. ▪ Consider if short-term changes are needed to incentivise/increase current supply. This includes, in time for Winter 2023, considering options to respond to an apparent increase in the frequency of trading periods where available supply is tight or insufficient compared to projected demand and reserve requirements. ▪ Policy settings for an enhanced automatic under-frequency load shedding scheme have been published. Monitoring the system operator's implementation progress with North Island distributors through to July 2025 deadline. ▪ Improve settings and support more demand side participation and ensure demand side response is a feature of security of supply settings. ▪ Understand and as appropriate ensure correct settings to encourage commercial arrangements to provide for demand-side response, with a focus on large industrial load. ▪ Regularly review and update security of supply settings with the system operators <p>Strategic linkage(s):</p> <p><i>Ambitions:</i> Low-emissions energy; Trust and confidence</p>		

Risk description and mitigations	Previous rating	Current rating
<p>System resilience</p> <p>If a major event or a natural disaster occurred and the system is not sufficiently resilient, then this may lead to unplanned supply interruption or cascade failure.</p>	Medium	Medium
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Regular monitoring by the SRC and the Compliance Committee. The major mitigant in relation to networks is price/quality regulation by the Commerce Commission. If there is an event NEMA (on a national basis) or the regional Civil Defence organisation (for a regional event) take on the monitoring task lifeline services including electricity. ▪ Current AUFLS arrangements, protection, and other technical requirements. The Authority's Extended Reserves Project will enhance the system resilience to sudden loss of supply. Policy work is complete and Transpower is working through implementation with AUFLS providers. ▪ Increase the range of technologies that can provide ancillary services. ▪ The future security and resilience programme are considering what changes are required to ensure the electricity system is secure and resilient given technology and other changes. ▪ Asset capability compliance obligations including reporting and monitoring requirements. <p>Strategic linkage(s): <i>Ambitions:</i> Trust and confidence <i>Capabilities:</i> Purposeful connection</p>		

Risk description and mitigations	Previous rating	Current rating
<p>Consumer facing sector participants are underprepared If distribution and/or retailers lifeline services are underprepared, then this may cause injury/death and/or unacceptable delays in supply restoration.</p>	Medium	Medium

Mitigations:

- Clear regulatory framework including thresholds of how/when the Authority regulates.
- Six monthly testing of market operations service providers and the system operator's system disaster recovery capability. To date, all parties have demonstrated mature system disaster recovery capability.
- There is an expectation that emergency services providers will anticipate loss of supply and have alternative arrangements in place.
- Review of industry response to COVID-19 and learnings shared across the sector.
- Reporting during the COVID-19 alert level 4 lockdown indicated that generator and distributor control rooms (personnel and systems) have strong resilience and the participants are prepared for maintaining lifeline services during a declared emergency.
- The Authority's enduring expectations regarding COVID-19 pandemic related lockdowns and retailers not making disconnections for non-payment continues to influence a more general cautious approach to disconnection.
- The consumer care guidelines are in place and guide retailers to create a more consistent and supportive consumer experience – especially in instances where there is greater risk of harm such as disconnection of medically dependent consumers.
- Monitoring of retailer alignment to consumer care guidelines.
- The phase one review of the systems and procedures that contributed to the scarcity pricing event of 9 August 2021 has been completed, and recommendations have been accepted by Transpower for implementation.
- Phase two review of the wider issues from the 9 August 2021 event has been completed and published, and provides new observations and recommendations aimed at creating enduring, and widespread, system improvements to the management of future events.
- Additional provisions to enhance the interfaces and procedures between the system operator and electricity distribution businesses.

Strategic linkage(s):

Ambitions: Trust and confidence

Risk description and mitigations	Previous rating	Current rating
<p>Consumer trust in the market</p> <p>If consumers lack engagement and trust in the electricity market (including consumer needs not being met) then this may result in a reduced confidence in the sector and in the effectiveness of competition to meet consumer needs, and a decreased willingness to increase their reliance on electricity for transport and heat.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Build trust and confidence through transparent and accessible information and engage directly with consumers. ▪ Publish reports and analysis of the electricity market and push through multiple channels to reassure stakeholders of the Authority’s role and the sector’s performance, including international comparison with other household necessities. ▪ The consumer care guidelines are in place and guide retailers to create a more consistent and supportive consumer experience – especially in instances where there is greater risk of harm such as disconnection of medically dependent consumers. ▪ Reviewing the efficacy of the consumer care guidelines, and monitoring retailer alignment to the guidelines. The guidelines aim to ensure retailers provide a consistent and supportive consumer experience, especially in instances where there is greater risk of harm such as disconnection of medically dependent consumers. ▪ Working with Utilities Disputes and the Consumer Advocacy Council, to better understand consumers, their challenges and needs. ▪ The Authority provides the majority of funds for Consumer NZ’s Powerswitch website and promotion to enable consumers to understand the benefits of checking and switching their power providers; compare offers in the retail market; check for potential savings; and make more informed switching decisions. ▪ The Authority’s Energy Transition Roadmap has been published and sets a clear pathway for how the Authority and markets will support an efficient transition to a low-emissions energy system that provides “abundant, affordable and reliable” electricity into the future. ▪ The Authority’s Wholesale Market Review is considering whether competition issues in the wholesale market can deliver beneficial outcomes to consumers now and through the transition to a low emissions environment, and enhance consumers trust in the market. 		
<p>Strategic linkage(s):</p> <p><i>Ambitions:</i> Low-emissions energy; Consumer centricity; Trust and confidence</p> <p><i>Capabilities:</i> Listening and empathy; Purposeful connection</p>		

Risk description and mitigations	Previous rating	Current rating
<p>Authority loss of social licence</p> <p>If the Authority loses relevance to the public, industry and sector stakeholders, or if the marketplace and/or regulation fails and/or insufficiently responds to the needs of stakeholders (particularly our most vulnerable stakeholders) then this is likely to result in a loss of social licence for the conventional delivery model and the loss of political and sector confidence.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Ensure the Authority’s strategic objectives and activities are relevant, impactful, and well tested with stakeholders, and demonstrate clear linkages to wider objectives. ▪ Ensure decision-making processes are robust and capture diverse voices. ▪ Conduct a programme of continuous improvement through regular review of strategic objectives, stakeholder perception and organisation capability and performance. ▪ Provide leadership for, and collaboration with, other agencies (MBIE, Commerce Commission, EECA, Climate Change Commission, Gas Industry Company, Utilities Disputes Limited, Consumer Advocacy Council, Consumer NZ, Transpower and other market operation service providers) on energy sector strategies, issues, and emerging consumer energy generation (in particular carbon reduction or zero carbon initiatives) and disruptive technology trends. ▪ Active stakeholder and consumer engagement planning and increasing the transparency of the Authority’s work programme. <p>Strategic linkage(s): <i>Ambitions:</i> Low-emissions energy; Consumer centricity; Trust and confidence <i>Capabilities:</i> Purposeful connection</p>		

Risk description and mitigations	Previous rating	Current rating
<p>System future proofing If the system is not able to adapt to future innovations/technology, then this may result in investment/progress being held back.</p>	Medium	Medium

Mitigations:

- Educate consumers and stakeholders about the system, the rules in place to support its evolution and the proactive role of the Authority.
- Review system settings for their ability to support and integrate uptake of new technology and emerging business models.
- Review the system’s ability to maintain security and resilience in the face of technology and other changes.
- Investigate the problems or opportunities with current system operation arrangements that will need to be managed given the expected changes to the electricity system from the transition to a low emissions economy.
- Investigate the capability and capacity of the distribution sector to support the uptake of new technology and new business models.
- The Authority’s *Energy Transition Roadmap* has been published and sets a clear pathway for how the Authority and markets will support an efficient transition to a low-emissions energy system that provides “abundant, affordable and reliable” electricity into the future.
- The future security and resilience programme will address issues and opportunities in relation to security and resilience of electricity supply arising from technology and other changes.
- The price discovery under the 100 percent renewables project, currently being undertaken by the MDAG, is considering whether changes to the wholesale market design are required to ensure efficient investment and operation under 100 percent renewables.
- The Authority is investigating whether any changes are required to ensure a smooth transition to a low emissions electricity system.

Strategic linkage(s):

Ambitions: Low-emissions energy; Consumer centricity; Trust and confidence; Innovation flourishing

Capabilities: Listening and empathy; Transformative mindset

Risk description and mitigations	Previous rating	Current rating
<p>Participant behaviour impacts on wholesale market</p> <p>If there is market collusion, a supplier disrupts the wholesale market through deliberate behaviour or a breach of rules, or an absence of market rules then this may result in a lack of confidence in the market and/or outcomes that do not reflect a competitive market.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ In response to increased market volatility and periods of high prices, the Authority undertook a review of spot prices in the wholesale market. The review focused on competition in the spot market and whether prices are being determined competitively. This included looking into the structure, conduct and performance of the spot market since 2018. The Authority consulted on the review and released an options paper in October 2022. ▪ Each week a report on the previous week's trading conduct is published. Monitoring staff identify and investigate any trading periods where the prices are not obviously aligned with underlying supply and demand. ▪ Increased resources in monitoring and compliance areas. ▪ Reviewing monitoring and compliance strategy, processes, and tools. The Authority has released a new compliance strategy (which has been informed by participant feedback). ▪ The penalty regime in the Electricity Industry Act has been updated to ensure that penalties better incentivise compliance with the Code. The Authority will continue to work with MBIE to ensure the regulatory framework continues to support our work through appropriate penalties and efficient processes. ▪ Ensure that the Authority is making full use of existing levers (including other agencies). ▪ Market monitoring will investigate any unusual market results and will refer any suspicious behaviour for further consideration including in relation to a suspected PEC, UTS, or to the compliance team as a breach investigation. ▪ Develop and run industry education. ▪ Conduct compliance deep dives to demonstrate, reinforce and incentivise good behaviour of market participants, act rapidly and highlight bad behaviour of market participants (reputation regulation), use Rulings Panel, enforce compliance. 		
<p>Strategic linkage(s):</p> <p><i>Ambitions:</i> Consumer centricity; Trust and confidence; Thriving competition</p> <p><i>Capabilities:</i> Purposeful connection</p>		

Risk description and mitigations	Previous rating	Current rating
<p>Staff capability and capacity</p> <p>If there is a reduction in staff capability (e.g., core and/or critical skill gaps), and/or capacity (decline in productivity due to health, safety, wellbeing, or a culture that is not conducive to organisational objectives), then this may result in the Authority's agility to respond to changes or ability to operate at full performance being compromised.</p>	High	Critical
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ The Authority has an ongoing recruitment programme to ensure we have the staff capability and capacity to operate at full performance and respond to changes. ▪ 12 behaviours that support our organisational values have been developed in consultation with staff and confirmed by senior management included as part of our induction process and embedded in the Authority's culture. The Authority actively rewards staff for demonstrating the 12 behaviours. ▪ The Authority's Workforce Strategy is continually evolving and is periodically presented to and approved by the Senior Leadership Team. ▪ The Health, Safety, and Wellbeing Committee (includes Senior Leadership Team representative) meets periodically, and findings/recommendations are presented to the Senior Leadership Team on a monthly basis. Health, Safety, and Wellbeing is reported to the Board quarterly with monthly updates provided as required. ▪ Investment in people leadership and people management capabilities and talent management approaches. ▪ Formal performance conversations occur quarterly. ▪ Conduct workforce analysis and planning to address capability and capacity gaps to ensure the Authority's strategy can be delivered. ▪ Conduct regular staff surveys to measure staff engagement levels and the Authority's culture, and address areas for improvement. ▪ Mental Health First Responder training has been rolled out to all people managers and a select group of Authority volunteers. <p>Strategic linkage(s):</p> <p><i>Ambitions:</i> Trust and confidence; Innovation flourishing</p> <p><i>Capabilities:</i> Inspired culture; Transformative mindset; Impactful delivery</p>		

Risk description and mitigations	Previous rating	Current rating
<p>Medium to long-term supply-side issues</p> <p>If there is a medium-term to permanent supply-side withholding or withdrawal of plant or fuel (e.g., thermal fuel) currently relied on by the system, either in a planned or unplanned manner, then this may lead to energy shortages.</p>	High	High
<p>Mitigations:</p> <ul style="list-style-type: none"> ▪ Integration of management of security of supply risks in transition to 100 percent renewables. ▪ Monitoring and regular reporting to management, Board and SRC. ▪ Investigate price discovery in the wholesale market in a world of 100 percent renewables, and the flow-on impacts for incentivising infrastructure investment. ▪ At the time a medium-term supply reduction is signalled or occurs: market facilitation through direct stakeholder interaction. ▪ Regularly review market settings to ensure supply and investment is encouraged. ▪ Monitor and enforce compliance with wholesale market information disclosure rules. ▪ Monitor developments in the gas industry. ▪ Regular stakeholder engagement. ▪ System operator publishes annual security assessments which include appropriate sensitivities and receives feedback on this assessment from stakeholders. ▪ Consider changes to the wholesale market (either Code amendments or market facilitation) to encourage more investment in the long term. ▪ Consider if short-term changes are needed to incentivise/increase current supply. ▪ The Authority is investigating whether any changes are required to ensure a smooth transition to a low emissions electricity system. <p>Strategic linkage(s):</p> <p><i>Ambitions:</i> Trust and confidence; Low-emissions energy</p> <p><i>Capabilities:</i> Transformative action, Impactful delivery, Purposeful connection</p>		

Key to the risk matrix

			Consequence									
			Insignificant		Minor		Moderate		Major		Severe	
			0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Likelihood	Certain	5	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25
		4.5	2.25	4.5	6.75	9	11.25	13.5	15.75	18	20.25	22.5
	Likely	4	2	4	6	8	10	12	14	16	18	20
		3.5	1.75	3.5	5.25	7	8.75	10.5	12.25	14	15.75	17.5
	Possible	3	1.5	3	4.5	6	7.5	9	10.5	12	13.5	15
		2.5	1.25	2.5	3.75	5	6.25	7.5	8.75	10	11.25	12.5
	Unlikely	2	1	2	3	4	5	6	7	8	9	10
		1.5	0.75	1.5	2.25	3	3.75	4.5	5.25	6	6.75	7.5
	Rare	1	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
		0.5	0.25	0.5	0.75	1	1.25	1.5	1.75	2	2.25	2.5

Glossary of abbreviations and terms

Abbreviation or term	Definition
Act	Electricity Industry Act 2010 (as amended)
Authority	Electricity Authority
Code	Electricity Industry Participation Code 2010
Consumer	Any person who is supplied with electricity other than for resupply.
Participant	A person, or a person belonging to a class of persons, identified in section 7 of the Electricity Industry Act 2010 as being a participant in the electricity industry. These include generators, Transpower, distributors, retailers, other lines owners, consumers directly connected to the national grid, buyers of electricity from the clearing manager and service providers.
Service providers	Parties contracted by the Authority to manage the electricity system (system operator) and market services set out in section 5 of the Act.
System operator	The system operator (currently Transpower) is the market operation service provider responsible for scheduling and dispatching electricity in a manner that avoids fluctuations in frequency or disruption of supply.