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2023/24

Annual Report



Purpose of this Annual report

This *Annual report* is the Electricity Authority Te Mana Hiko's formal report to Parliament on its results for the period 1 July 2023 to 30 June 2024.

The report contains information required by sections 150–156 of the Crown Entities Act 2004.

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Our year in review

Consumer interests are the driving force of our work. This year we articulated a new vision for the Electricity Authority and a multi-year plan to deliver better outcomes for consumers. We focused on enhancing security of supply, harnessing the power of data for better performance and enabling greater flexibility in the system for a more affordable, secure and resilient energy future for New Zealand.



Improving security of supply

Keeping the lights on now and in the future



We permanently implemented four options to better manage risks to electricity supply and consulted on the future operation of New Zealand's electricity system.



Improving visibility of generation development

We created a generation investment dashboard to give market participants ready access to data to make investment and contract decisions, and monitor new generation coming to market.



Promoting competition and innovation

Market 2.0

We received the Market Development Advisory Group's report and incorporated their recommendations into our work programme to improve the wholesale market and drive for a robust future market.



Battery trial

In response to lessons learned from a participant trial, we made it easier for aggregated battery systems to participate in the wholesale market.



Protecting the interests of small consumers

Consumer Care

We received over

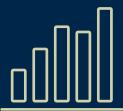
1,000

submissions on our Consumer Care Guidelines consultation and decided to mandate the guidelines to improve protections for consumers.



We held our first consumer wānanga to bring together diverse groups invested in improving energy wellbeing in Aotearoa.

We set up a new Electricity Authority Advisory Group to ensure the needs and aspirations of consumers are represented alongside industry voices.



Improving transparency of, and access to, data

Supporting industry decision making

26

new datasets provided.

817k

reports viewed.

1.3m

data files downloaded.



Enforcing compliance

Compliance education

We launched a new industry training programme and delivered two forums, two compliance team training sessions, two webinars and published 14 case studies.

66

compliance cases closed.

1

case referred to the Rulings Panel.

27

spot and reserve market trading conduct cases resolved.

09

Code exemptions processed.



Monitoring, informing and educating



252k new visitors to our website.

Feedback gathered on 40 areas of work through consultations.

212

news items, keeping our stakeholders up to date with our work.

15

'Eye on electricity' items provided easily readable insights into the industry.

157

LinkedIn posts.

52

trading conduct reports.

49

Market Brief newsletters.

Message from our Chair and Chief Executive

Tēnā koutou katoa. On behalf of the Electricity Authority Te Mana Hiko, the Board and kaimahi, we are pleased to present our Annual report for 2023/24.

The year reported on represents a period of significant change – both internally and externally. At the beginning of the financial year, there had been significant changes in the Board and in the leadership of the organisation.

External changes also made it clear that the pace of traditional regulation wouldn't deliver the energy security New Zealand needs. Tweaking at the margins was not going to give consumers the security, affordability and flexibility they needed, and the Board asked for a step change in approach. Over the year, the organisation geared up to focus on driving both performance and regulation. The focus was on getting ahead of change rather than barely keeping up with it.

Our vision is for consumers to have choices in accessing the energy they need now, and in the future, to ensure they and New Zealand prosper. That future will inevitably see consumers more in control of their electricity usage; widespread use of electric vehicles, battery storage and smart chargers to provide consumer choice and help stabilise the grid; and communities that are increasingly resilient in the face of significant weather events and natural disasters.

Our vision is for consumers to have choices in accessing the energy they need now, and in the future, to ensure they and New Zealand prosper.

To make this vision a reality, the Authority confirmed a multi-year delivery plan – articulating what we expect to deliver in the short, medium and long term – and the benefits it will provide to consumers.

This plan is anchored in security of supply, and a competitive and efficient electricity market where investment and innovation flourish. This requires an evolution of the market. In response to the Market Development Advisory Group's valuable advice – *Price discovery in a renewables-based electricity system* – we have incorporated a comprehensive work programme into our multi-year plan. The recommendations shape and augment the Authority's other work to get us to Market 2.0 - a wholesale electricity market that can meet consumer demand with an increasingly renewables-based electricity system. We do not underestimate the amount of work required and we are grateful to the Advisory Group members for their work and comprehensive advice.

Security of supply continues to be our key priority. The system is navigating stress as we adapt to new technologies, seek greater investment and manage our continued dependence on the weather. We've put in place more initiatives to enable the system to respond to peak periods and keep the lights on in the short term, but we expect the peaky periods to be around for the next few years as we manage the pipeline of intermittent generation beginning to come online and ageing thermal assets are retired.

For the sake of consumers, communities and the economy, we have to get past the winter-to-winter management that has dogged us over successive years and look to creating a stable and sustained pathway to secure energy supply. There is no single, simple answer, but we must prepare for a future where more participants interact in the market, and security of supply is as much about demand response as it is about transmission towers and power lines.



Anna Kominik
Chair



Sarah Gillies
Chief Executive

Enabling flexibility in the system and the ability to maximise technologies, data and distributed energy resources will become critical in smoothing winter peaks and giving consumers more control over their electricity use. This is not new, but the regulations were at risk of lagging behind technology, including the expected exponential growth of artificial intelligence and the data centres needed to power the future.

We were fortunate to have the Minister for Energy agree to a modest increase in our baseline funding, which came into effect from 1 July 2024. Before this, the Authority's appropriation had not changed significantly since its establishment in 2010. This increase means the Authority can undertake the shift required to deliver on its work plan and deliver for consumers. We are grateful to everyone who submitted on our levy consultation and those who supported this increase.

The Authority is already working more with others in the sector – with regulated parties, agencies, industry and consumer groups – to address immediate stresses on the system. We facilitated the first consumer wānanga to bring industry and consumer groups to work together to address energy hardship. There have been tangible results from this engagement.

We had more consumers engage directly with our work than ever before and we established a new Advisory Group to make sure we have a direct channel for diverse voices to give advice and inform our decisions. This group brings together expertise and experience that reflects the changing electricity landscape we regulate in.

There's a lot to do and we haven't got it all right yet. Part of being a good regulator is understanding when and where trade-offs are necessary. This means making tough decisions, driving greater value from the funds we receive and being proactive about ensuring market rules enable, rather than hinder, better outcomes.

Thank you to everyone who has worked with us over the past year and thank you to our Board and our kaimahi who are working hard to deliver improved outcomes for consumers. We have made great strides over the past year and will continue to build on this momentum in 2024/25.

He whakataukī

Ko te pae tawhiti, whāia kia tata, ko te pae tata, whakamaua kia tīna.

Seek out the distant horizons, while cherishing those achievements at hand.

This whakataukī describes the process and intention of our Annual report as it lifts our view to the future, while keeping us focused on the changes we need to make today. It recognises the skills and knowledge we have gained and how we use that as a foundation for the path forward.



A new way of bringing consumer voices to the Authority's decision making

When considering the design of the electricity market, we're not just thinking about the needs of today's consumers, but those of their children and their children's children.

The form and function of our advisory groups is an important consideration as we build our shared knowledge. This year, we made changes to the way we engage with consumers and industry to bring their voices closer to our decision making.

Following consultation in 2023, we established the new Electricity Authority Advisory Group in February 2024. The new group is charged with bringing the voices of our increasingly diverse stakeholder groups, including consumers, to our work.

The group of 25 members is characterised by diverse perspectives, independent voices, fresh thinking and flexible approaches to engaging with our work.

The Advisory Group exists alongside the Security and Reliability Council and various technical working groups established to support specific projects at the Authority.

We expect the diversity of perspectives from the group to be their strength. When selecting members, the Authority balanced seasoned and experienced industry perspectives with those representing the needs and aspirations of consumers. Members will serve terms of between one and three years, ensuring we continue to bring diverse skills, views and experience to decision making for the benefit of consumers.

As well as supporting the transformation of the electricity industry through expert and consumer-centred advice, the Authority benefits from the trust and confidence the Advisory Group brings to the regulatory development process.

About us

The Electricity Authority Te Mana Hiko is an independent Crown entity responsible for the governance and regulation of Aotearoa New Zealand's electricity system and markets.

Who we are

As a kaitiaki of electricity, our vision is for consumers to have choices in accessing the energy they need now, and in the future, to ensure they and New Zealand prosper.

Through our work, and the work we do with the other entities responsible for energy regulation and policy, we are focused on supporting a competitive and efficient wholesale market that produces reliable electricity at the lowest possible cost for the long-term benefit of consumers, large and small. Meeting the energy needs of the future requires investment and innovation; consumers to have more control over their electricity; widespread use of electric vehicles, battery storage and smart chargers to help stabilise the grid; and communities to be increasingly resilient in the face of significant weather events and natural disasters.

The Authority has clear strategic objectives for what we need to deliver to achieve our vision and priorities to improve consumer choice and access to secure and affordable electricity.

Our role

As New Zealand's electricity regulator, we steward the system to produce reliable electricity at the lowest possible cost and for the long-term benefit of consumers.

We continually look for opportunities to drive value for money and promote a competitive and efficient market to enable an electrified future for New Zealand.

The electricity sector interacts with many others, and the broader economic environment is critical to our work. We consider the long-term economic, social, cultural and environmental implications of our work and ensure the right rules are in place that both enable and guide regulatory change.

Our independence is an important part of ensuring a functioning and competitive market, enabling confidence in the efficient operation of the large and complex electricity industry. We determine a work programme that meets our statutory objectives and the expectations set by the Government through our letter of expectations and Government policy statement, as well as by communities and consumers. We test ideas and challenge the status quo with consumers' interests at the heart of everything we do. While our independence means we give advice rather than take direction, we are attuned to our external operating environment and the Government's priorities.

Reflecting Government priorities

The Authority's work needs to meet our legislative requirements, statutory objectives, along with best-practice guidance provided by central agencies,¹ the Office of the Controller and Auditor-General and Audit New Zealand.

We have regard to the Government's expectations communicated in the enduring letter of expectations for Crown entities, annual letter of expectations from the Minister for Energy and the Statement of Government Policy made under section 17 of the Electricity Industry Act 2010. We are proactive in our engagement with the Ministry of Business, Innovation and Employment (MBIE) as our monitoring agency. This helps ensure we are meeting the expectations outlined in the *Monitoring arrangements for MBIE-monitored Crown entities*.

We work together with the Commerce Commission to ensure regulatory alignment. We are part of the Council of Energy Regulators which facilitates a whole-of-system approach to risks, issues and opportunities within the energy markets regulatory system. We work closely with other relevant government agencies to support an energy regulatory system that enables innovation, competition, consumer choice and affordability.

¹ The central agencies are: Te Tai Ōhanga The Treasury, Te Kawa Mataaho Public Service Commission and Te Tari o te Pirimia me te Komiti Matua Department of the Prime Minister and Cabinet.

Our strategic direction

In our *Statement of intent 2021–25*, we set out the Authority's strategic framework, along with impact measures and targets for our strategic intentions. It is important to note this annual report reflects our previous statement of intent and strategic ambitions. Our new *Statement of intent 2024–28* will drive our strategic direction for the coming years.

As a regulator of New Zealand's electricity system, our work is focused on maintaining energy security, system adaptability and affordability for consumers. We work with the sector to help power a growing and productive economy.

Our strategic framework set out five ambitions for the sector that guide how we prioritised our work. These strategic ambitions focused us on progressing and achieving our statutory objectives and purpose to ensure we create long-term benefits for consumers.

Our purpose

To enhance New Zealanders' lives, prosperity and environment through electricity.

Strategic ambitions (as defined in 2021)

- We want **low-emissions energy** to electrify the economy.
- We want **consumer centricity** to guide regulation and the industry.
- We want to build **trust and confidence** in the industry for all stakeholders.
- We want to see **thriving competition** delivering better outcomes for New Zealanders.
- We want to see **innovation flourishing**.

Our desired impact

- **Energy security** to meet the needs of consumers and the economy, now and into the future.
- **Market competition** enables a better energy future driving progress, affordability, efficiency and better outcomes for New Zealand.
- The electricity system evolves through **innovation and disruption**, by industry participants and the Authority thinking beyond the status quo.

Our future-focused priorities

Our *Annual corporate plan 2023/24* set out our priorities for the financial year:

- **System security and resilience** – Making sure market rules enable innovation and investment in generation while ensuring a reliable electricity system.
- **Enabling investment and innovation** – Promoting investment and supporting the uptake of new technologies for more dynamic management of the power system.
- **Consumer protection** – Improving protections for consumers and small businesses, improving how we monitor the retail market and the conduct of retailers.
- **Monitoring, compliance, education and enforcement** – Promoting a stable regulatory environment by strengthening our compliance activities and improving data disclosure to support decision making.
- **Building trust and confidence** – Improving our capability and capacity to deliver.

Note: This Annual report reflects on the 2023/24 financial year as the end of our previous accountability document cycle. It should be read alongside our *Statement of intent 2021–25*, *Statement of performance expectations 2023/24*, *Annual corporate plan 2023/24* and the previous Minister's letter of expectations 2023/24. For information on our new vision and strategic objectives, read our *Statement of intent 2024–28* and *Statement of performance expectations 2024/25*. These can be found on our website at: www.ea.govt.nz/about-us/corporate-documents

Statutory objectives

To promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.

To protect the interests of domestic consumers and small business consumers in relation to industry participants dealings with these small consumers.

Our performance: Impacts and outcomes

Assessing our performance

We measure our performance against how we progress our strategic ambitions and statutory objectives using the impact and outcome measures set out in our *Statement of intent 2021–25*.

We have impact measures for each strategic ambition to measure how our work achieves our strategy. We then have outcome measures for our main statutory objective to measure how successful our work has been at achieving competition, reliability and efficiency for the long-term benefit of consumers. Our performance against these measures is listed in this report, but next year we will assess our performance against the refreshed measures in our *Statement of intent 2024–28* which reflect our updated strategic direction, impacts and outcomes.

Measuring our impact and outcomes

We measure our impacts and outcomes against the following ratings and criteria.

Rating	Criteria
Achieved	Result is heading in the direction of the desired trend
Maintained	Result remains stable compared to the previous year
Not achieved	Result is not heading in the direction of the desired trend

This year, 26 out of our 38 impact and outcome performance measures were achieved, four were maintained, and eight were not achieved. More information on the measures that did not achieve their targets is included in the results sections for our strategic ambitions and statutory objectives.

We seek to improve our performance year-on-year to improve the long-term benefits for consumers. Due to the long-term nature of our ambitions and outcomes, it may take several years for measurable change or trends to become clear. We closely monitor trends to confirm we are moving towards the desired results.

We take an evaluative approach to measuring our progress. Each year we collect qualitative and quantitative information using the following methods:

- **Authority data** – Information collected or held by the Authority. For example, website analytics, monitoring data and database statistics.
- **Independent assessment** – An independent assessment of the Authority's impact measures against its strategic ambitions was conducted by expert consultants, MartinJenkins. This involved desk research, reviews of project documentation and interviews. This year there were interviews with 16 Authority staff and eight external stakeholders, including industry participants and representatives of commercial and residential consumers.
- **Industry participant survey** – An online survey of electricity industry participants and stakeholders was conducted by independent research company AK Research. The survey focused on respondents' perceptions, as representatives of their organisations, of the Authority's strategic ambitions and statutory objectives. This year 137 out of 491 people (28%) selected at random responded to the survey, a 16% increase from last year.
- **Consumer perception survey** – An independently conducted online survey of a nationally representative sample of around 1,000 New Zealanders on electricity consumers' perceptions of the Authority's statutory objectives was conducted by independent research company AK Research. The survey had 1,033 respondents and achieved a 38% response rate.

These sources combine to paint an overall picture of our performance that we use in our reporting.²

² The full survey results and independent assessment will be available on our website in November 2024 at www.ea.govt.nz/about-us/corporate-documents/



Our four years of independent assessment progress

We hold ourselves and our work to the highest possible standards.

Each year, we measure our performance and progress against our statutory objectives and organisational strategy. We use an external provider to ensure the assessment is independent, removing the risk of internal bias. This independent assessment has been delivering qualitative information on areas we are doing well in, and areas for improvement, since 2021.

The 2023/24 independent assessment (undertaken in June 2024) delivered our highest rating yet. We saw an improvement across all impact measures compared with last year's results. We also lifted our performance against all assessed measures over the last four years.

The final report from the assessment points to many reasons for the improvement across all measures. For example, the 'range of options considered during decision-making processes' for the consumer centricity ambition scored a result of five.

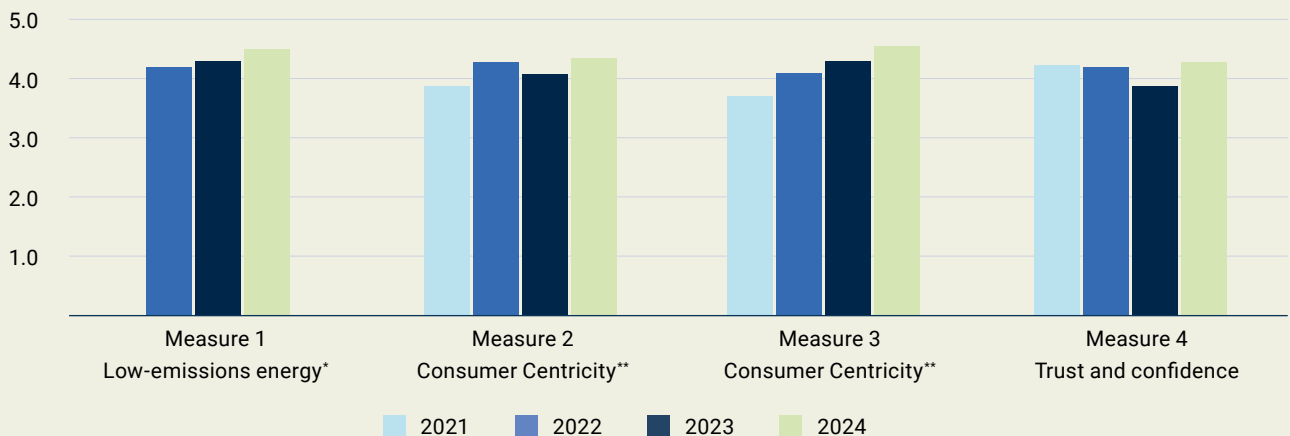
The report comments that the nature of problems consulted on were well articulated, and the options provided by the Authority to counter the problems were clearly linked.

We also scored a five on the 'identification of, and engagement with, the target audience of the documents assessed'. For example, in the sampled consultation, we highlighted which participants would be affected and when they will be consulted with options.

Providing clarity on our consultations and decision-making process remains a priority for us and we continue to focus on improving our engagement. This includes making changes that bring the voices of both industry and consumers closer to our work through the new Electricity Authority Advisory Group.

These two examples show our focus on continuous improvement and working with industry participants to provide better outcomes for electricity consumers.

Figure 1: Independent assessment of performance measure results 2021-24



* The assessment of the low-emissions energy measure was added in 2022.

** There are two assessment measures for consumer centricity: the quality of decision-making processes on meeting consumers' needs and the quality of our engagement with consumers in our decision-making processes.

Our performance against our strategic ambitions

Strategic ambition 1: Low-emissions energy

The Authority needs to provide certainty for the industry and consumers. The scale and rapid pace of technological change means we need to evolve beyond traditional regulatory approaches. The Authority needs to stay ahead of change and provide regulatory certainty through more transparency, engagement and collaboration. This year, the Board reset the organisation to deliver the increased certainty and responsiveness demanded of us as New Zealand seeks to meet its goals around energy security and net zero emissions by 2050.

We engaged with other agencies, such as the Minister for Business, Innovation and Employment, Commerce Commission, Energy Efficiency and Conservation Authority and the system operator on the expected future challenges and opportunities of the operation of the electricity system.

As the New Zealand electricity market evolves, we can expect technical and operational challenges for the power system to emerge from the bi-directional power flows created by increased distributed energy resources. Consumer-owned electricity distribution businesses are evolving their scope from solely being network owners and operators. Distribution companies are becoming distribution system operators, alongside consumers who will increasingly participate in the operation of the power system with solar panels and batteries.

The independent assessment found:

“ ...evidence of the Authority being responsive to issues relating to low-emissions transition, as they arose. They also illustrated some of the challenges faced by the Authority in ensuring that new technologies and emerging market developments, including those that can support the transition to low-emissions energy, can be enabled within the existing Code.³ ”

We heard through the independent assessment that changes like electrification are occurring at a rapid pace. External stakeholders are looking to the Authority to support this change and safeguard the interests of consumers, including creating regulatory changes in a more structured and proactive way.

We will continue our work to review the future operation and resilience of the power system to ensure it remains fit for purpose as New Zealand moves to a power system with more distributed generation, intermittent generation and increased consumer involvement.


³ MartinJenkins Independent Assessment p.29, see: www.ea.govt.nz/about-us/corporate-documents/

Our impact measures for low-emissions energy

Impact	Measure	Desired trend	2021/22 result	2022/23 result	2023/24 result
Our electricity market settings enable an efficient transition to reliable low-emissions energy in New Zealand	Improved participant confidence in settings to facilitate efficient transition	Increasing	33%	36%	Achieved: 42%
	Improved participant confidence in reliability as NZ transitions to low-emissions energy	Increasing	52%	37%	Achieved: 47%
	Assessment of the ability of market settings to facilitate an efficient transition to low-emissions energy	Increasing	4.2 out of 5	4.3 out of 5	Achieved: 4.5 out of 5
Network and market price signals support the lowest overall cost to consumers	Level of implementation of cost-reflective network prices, transmission pricing and real-time pricing	Increasing	The distribution pricing scorecard assessments were on hold in 2021/22. TPM is on track. RTP project is on track.	3.9 out of 5	Achieved: The distribution pricing scorecard assessments were on hold in 2024 whilst we engaged with distributors on the targeted reform of distribution pricing issues paper. However, distribution pricing is becoming more cost-reflective*

Notes:

* Distribution pricing scorecards were on hold in 2024. Some measures included in the scorecards are off-peak prices and peak prices. We have observed that distribution pricing is becoming more cost-reflective in these areas (noting that the major reforms to transmission pricing and real-time pricing came into effect in 2022/23). Most distributors (20) reduced their off-peak rates compared to 2022/23 rates. 15 out of 29 distributors have included discussions of the calculation of long run marginal cost (LRMC), which is used to set cost-reflective peak rates, in their 2024-25 pricing methodologies. This is a significant increase compared to only 3 distributors in 2022/23 that used the LRMC calculation to link network conditions to peak signal strength. Additionally, 28 distributors now have load control tariffs for their residential consumers, compared to 25 distributors in 2022/23. Load control tariffs are discounts to consumers in exchange for allowing control (usually of hot water during peak periods). This shows increased ability for demand-side response by residential consumers through their choice of tariff, which will be reflected in network prices.



By making it easier for investors to access information, we improve the likelihood of investment in new generation. This drives competition, innovation and ultimately more affordable electricity for consumers.



Keeping our eyes on the future: Improving visibility of generation investment

Our new generation investment dashboard⁴ gives market participants access to the information they need to make immediate and future investment and contract decisions. Providing easy access to information on timing and costs of the construction of generation assets, the dashboard will support better informed decision making.

Increasing visibility of the generation pipeline also enables better monitoring of long-term security through viability of system capacity, competitive outcomes and any constraints on investment.

We've previously relied on annual generation investment surveys to provide visibility of where and when investments in new generation are made. As well as summarising survey data collected, the new dashboard provides better visualisation of information on investment projects.

This makes it easier for investors to gain valuable insights and better understand risks and returns.

As we work towards improving how we collect and publish data on the pipeline of generation and demand developments, we will enhance the dashboard to include changes to future demand and supply.

Alongside this, the Authority has engaged with the sector on how to improve data collection more broadly. By defining the frequency and level of information that should be collected, and what should be published, we will provide a better picture of New Zealand's future electricity supply and demand.

By making it easier for investors to access information, we improve the likelihood of investment in new generation. This drives competition, innovation and ultimately more affordable electricity for consumers.

⁴ Generation investment dashboard: <https://public.tableau.com/app/profile/electricity.authority/viz/Investmentpipeline/Investmentpipeline>

Strategic ambition 2: Consumer centricity

At the Authority, we're enabling a future where consumers have more agency over the energy they use. While the landscape we regulate is a dynamic one, what doesn't change is our commitment to regulating in the best interests of consumers over the long term.

In 2023/24 we achieved two significant milestones:

- Following consultation⁵ where approximately 1,000 survey responses and 100 written submissions were received, we updated and strengthened the Consumer Care Guidelines and decided to mandate the guidelines from 1 January 2025.
- We established the Electricity Authority Advisory Group and appointed 25 members to represent a diverse range of perspectives and voices, including those of consumers. This group will provide independent advice on our work programmes and test the practical implications of regulatory decisions with a strong focus on improving outcomes for consumers.

This year, we began to engage in new ways to extend our reach and bring greater and more diverse views to our work. This included using online surveys alongside our usual formal submissions process and facilitating a successful electricity consumer and industry wānanga. We received positive feedback from wānanga participants, with most expressing an interest in staying involved in future events.

We worked to engage a wider audience and this was recognised in the independent assessment:

“ Over the year, the Authority has prioritised residential consumer energy hardship, and its efforts towards this are evident. The Authority has made progress on engaging with and better understanding the needs of household consumers, particularly those in energy hardship. It has made efforts to develop relationships and formal partnerships/Memoranda of Understanding with consumer advocacy groups. In external interviews, we heard that these efforts have been recognised by stakeholders.”⁶

The independent assessment also found opportunities for improvement, including engagement with a broader range of consumers, in particular vulnerable consumers (including medically dependent or disabled consumers) and those investing in electric vehicles and distributed generation. Through our new Advisory Group, updating the Consumer Care Guidelines, and consumer education work, we are improving representation for these consumers. Their perspectives and aspirations will be reflected in our decision making as we move into our 2024/25 work programme.

⁵ www.ea.govt.nz/projects/all/consumer-care-guidelines/consultation/improving-the-consumer-care-guidelines/

⁶ MartinJenkins Independent Assessment p.20

Our impact measures for consumer centricity

Impact	Measure	Desired trend	2021/22 result	2022/23 result	2023/24 result
Our decisions improve the way the sector meets consumers' needs	Improved participant perceptions in the electricity system's ability to meet consumers' ongoing needs	Increasing	48%	41%	Achieved: 46%
	Assessment of the quality of our decision-making processes on meeting consumers' needs	Increasing	4.25 out of 5	4.1 out of 5	Achieved: 4.4 out of 5
	The customer transfer process works effectively in the event of retailer default	Increasing	Achieved	Achieved	Achieved: There have been no events of trader default which have necessitated customer transfers. The Authority has reviewed its trader default processes, and the Registry Manager's systems have been audited.
Consumers are engaged with through our decision-making processes	Assessment of the quality of our engagement with consumers in our decision-making processes	Increasing	4.1 out of 5	4.3 out of 5	Achieved: 4.6 out of 5
	Increased consumer awareness of the impact of the Authority's role and the benefit our work has on them	Increasing	2021/22: The Authority appeared in 222 media items with 18 positive, 38 negative, and 166 neutral. 77 social media items were published across LinkedIn and Twitter. These had 54,424 impressions (views) with a 3.94% engagement rate.	2022/23: The Authority was mentioned in 574 media items. 297 social media items were posted (154 LinkedIn posts; 4.5% engagement rate and 143 Twitter posts; 3.4% engagement rate).	Achieved: The Authority appeared in 773 media items. 157 items were published on LinkedIn, with a 5.1% engagement rate*.

Notes:

* X (formerly Twitter) dropped from metric. The Authority is moving away from using this platform.

Strategic ambition 3: Trust and confidence

We work to build trust and confidence in the industry and regulation through greater transparency and improved understanding of our work. Consumers expect industry participants to abide by rules designed for their long-term benefit. Participants require a stable investment framework and regulatory environment so they operate on a level playing field and can make decisions in the best interests of New Zealand.

We are aware of maintenance and network investment cost pressures distributors face and are concerned about the prospect of substantial price rises for consumers. We have focused on reforming distribution pricing for the benefit of consumers. This year, we published a two-year indicative work programme for distribution reform. This shows our key projects and a prioritisation framework, so industry has visibility of planned regulatory change proposals. We also established a Distribution Connection Pricing Technical Group to capture stakeholder knowledge in our work on connection pricing and help test the workability of potential Code amendments.

We have seen a 12 percent improvement in participant perceptions of trust and confidence in the Authority and how we fulfil our role. Our industry participant survey showed 40 percent of participants agreed they have confidence in the role the Authority plays as a kaitiaki of the electricity sector, compared with 28 percent last year. We recognise there is still more the Authority can do to drive value for money and promote competitive and efficient market mechanisms, and our 2024/25 financial year work programme reflects this.

Results from the 2023/24 independent assessment also show an improvement in trust and confidence compared with last year. The assessment reviewed a sample of documents that showed our target audiences were well identified and understood, and our ongoing efforts for transparency and accessibility will help support trust and confidence in both the Authority and the sector.

Future focus areas include ongoing work to make technical material more accessible for consumers, explaining jargon, providing plain English summaries and making background information available. We will continue to ensure publications include supporting information like next steps, timeframes and processes to build the trust and confidence of participants.

Our impact measures for consumer centricity

Impact	Measure	Desired trend	2021/22 result	2022/23 result	2023/24 result
The Electricity Authority and our actions promote trust and confidence	Improved participant perceptions of trust and confidence in us and how we are fulfilling our role	Increasing	23%	28%	Achieved: 40%
	Assessment of the quality of material produced (eg, Electricity Market Information ⁷ reports, thought pieces)	Increasing	4.3 out of 5	3.9 out of 5	Achieved: 4.3 out of 5
We are active regulators who enhance operational efficiency and reliability	Improved participant perceptions of reliability and operational efficiency	Increasing	59%	54%	Achieved: 55%
	Market services are resilient to adverse events (as measured on a case-by-case basis)	Maintain	Achieved	Achieved	Achieved: Market services continue to be resilient to adverse events*
We improve compliance and sector conduct	Improved participant perceptions of the quality of our monitoring	Increasing	52%	52%	Achieved: 54%

Notes:

* Market operation service providers must regularly test their business continuity plans and disaster recovery processes. This enables them to address any required improvements before an adverse event occurs.

⁷ Electricity Market Information website (EMI) is the Electricity Authority's avenue for publishing data, market performance metrics, and analytical tools to facilitate effective decision making within the New Zealand electricity industry.

Strategic ambition 4: Thriving competition

The Authority is focused on enabling a thriving competitive market where innovation drives progress, efficiency and better outcomes for New Zealand. Competition delivers New Zealanders choice when it comes to the retailer they buy electricity from and ensures they can do so at the lowest possible cost.

This year, the Market Development Advisory Group (MDAG) investigated how the wholesale market might operate with an electricity supply that is increasingly based on renewable forms of electricity generation. The Authority published MDAG's final recommendations paper and their recommendations have been incorporated into our work programme as a sequenced package. We had several projects underway already addressing some of their recommendations and these are progressing with priority.

To broaden and strengthen hedge disclosure obligations, we published a final decision paper on changes to sub part 5 of Part 13 of the Electricity Industry Participation Code 2010. Consistent with MDAG's recommendation, the amendments will improve transparency and competition in the contracts market, leading to more efficient prices for consumers.

This work also supports price signals, which are essential for driving investment in electricity generation and storage to support electrification. We are collaborating with the NZX to hold workshops with industry participants on the functional changes to the hedge disclosure system to ensure the benefits of our Code amendments are fully realised.

Additionally, a key activity for our 2024/25 work programme is a review of risk management options for the retail electricity market. This is the first stage of a multi-year programme of work to investigate retail market competition, access to wholesale electricity contracts, pricing of contracts and regulation of the market.

In 2024/25 we will also work with the Commerce Commission through the Energy Competition Task Force (Task Force), established in August 2024. The Authority is already working on a number of regulatory measures to encourage more competition in the market and manage electricity price risks. The Task Force wants to accelerate these benefits through two packages to:

1. enable new generators and new retailers to enter, and better compete in the market
2. provide more options for end-users of electricity.

We will continue to build consumers' awareness around competition and their ability to switch providers to get a better deal on their electricity. This includes education campaigns to improve consumer mobility, encouraging competition, innovation and continued market investment.

Our impact measures for thriving competition

Impact	Measure	Desired trend	2021/22 result	2022/23 result	2023/24 result
New entrants can compete on a level playing field with established participants	Improved participant perceptions of ability for new entrants to compete with established participants	Increasing	27%	24%	Maintained: 24%
Market settings enable competition between distributed energy resources (DER's) and established technology solutions	Number of network companies seeking to procure non-network services ⁸ on a competitive basis	Increasing	17 out of 26 network companies surveyed (65%)	13 out of 26 network companies surveyed (50%)	Not achieved: 10 out of 29 network companies surveyed seek to procure non-network services on a competitive basis (34%)*
	Number of participants providing non-network services to network companies*	Increasing	4 out of 26 network companies surveyed (15%)	2 out of 26 network companies surveyed (8%)	Maintained: Of the network companies surveyed, two are receiving non-network services from a participant**
	Improved participation in a range of electricity markets, for example, demand-side participation in a range of markets	Improving	On track	On track	Achieved ***

Notes:

- * Survey respondents expressed concerns that it was difficult to compete if they were not a gentailer.⁹ Respondents also noted that the ability to access appropriate risk management mechanisms continues to be difficult. Securing hedges at a viable rate for new entrants was also an issue. Conversely, other respondents considered a level playing field did exist, acknowledging in comments that new entrants can't expect to be on the same level on day one. We will take these views into consideration as we continue to address competition within the parts of the electricity system that we regulate.
- ** The unchanged result seen is based on the self-reported business practices of survey respondents. It is an indicator of behaviour across network companies in the sector and their current practices for innovation. Due to the nature of random sampling from the Authority's participant register, the survey sample will include varying numbers of different groups of participants each year. Survey recipients are invited to respond, but it is not mandatory.
- *** 28 distributors now have load control tariffs for their residential consumers, compared to 25 distributors last year. This shows increased ability for demand-side response by residential consumers through their choice of tariff.

⁸ The use of controllable flexibility resources (eg, batteries, hot water demand, EV chargers, or other demand response) to manage congestion on a network, typically by third parties under contract with (or otherwise incentivised by) the network owner.

⁹ An organisation that is both an electricity generator and an electricity retailer.

Energy markets are going through a period of dynamic change. New technologies, innovation, changing consumer behaviour and expectations, and new patterns of generation and demand are all shaping what the future electricity system will look like.



Resilient, affordable electricity for the future

In December 2023, the Market Development Advisory Group delivered their independent advice to the Authority on the challenges and opportunity of evolving the electricity market to meet future demand and complexity.

The final report *Pricing in a renewables-based electricity system* brought together significant contributions from industry, international experts and other stakeholders. The report contains 31 recommendations for changes to evolve the wholesale electricity market to ensure resilient, affordable electricity for the future.

The wholesale electricity market is currently delivering more than 80% of renewable electricity generation and will continue to drive new investment in generation over the next few years. Energy markets are going through a period of dynamic change. New technologies, innovation, changing consumer behaviour and expectations, and new patterns of generation and demand are all shaping what the future electricity system will look like.

Regulation needs to keep up with this dynamic system, while at the same time managing the here and now. The Advisory Group's report and our work programme seek to anticipate these changes and make sure the market evolves to deliver a secure, resilient and affordable electricity future for all consumers.

Strategic ambition 5: Innovation flourishing

The Authority's role is to help unlock the full benefits of innovation for consumers by making sure regulatory and market settings are helpful to innovation, new technologies and industry success.

While it can be challenging in a regulatory environment to respond to innovation, we've laid the groundwork for a more competitive, innovative and forward-looking market environment. This will deliver greater control to consumers when it comes to electricity usage, reduced reliance on the grid, increased resilience during weather events and more affordable prices in the long term.

Our key levers for enabling ongoing innovation and improvements include market facilitation measures and amendments to the Electricity Industry Participation Code 2010. This year we continued to focus on updating regulatory settings to support an electrified economy.

We considered feedback on, or provided input into, solutions that will promote flexibility in the form of demand response, battery energy storage systems and the impact of potential offshore wind development. An example of this was a recent trial with the system operator to assist SolarZero and Ara Ake to implement a distributed battery system trial using the dispatch notification product. Following the trial, we found some areas of the Code could be enhanced to improve participant access to the dispatch notification product. Following consultation, we published our decision paper in January 2024 to amend the Code.

Another focus is achieving efficient distribution pricing to help provide a reliable and affordable electricity supply for consumers. Distribution pricing reform is a key priority and will require substantial investment in distribution networks. Distribution pricing reform aims to maximise the consumer benefits from increased electric vehicle adoption, new technology and the building of distributed generation (eg, solar panels and batteries). Solutions exist such as reducing the cost of connection to incentivise more distributed generation and storage solutions. Another solution is using price signals to incentivise consumer behaviour through reducing off-peak prices to encourage off-peak consumption to ease peak demand on infrastructure.

This year we established a Distribution Connection Pricing Technical Group to ensure our work on connection pricing benefits from stakeholder knowledge, and to assist with testing the workability of related Code amendments. We also set out our five main focus areas for distributors' pricing for 2025/26.¹⁰ We are aware of cost pressures facing distributors and are concerned about the prospect of substantial price rises for consumers. These focus areas build on our key aims for reforming distribution pricing, for the long-term benefit of consumers.

We know we need to keep working to deliver regulation that is fit for purpose and continues to promote innovation through exemptions and Code amendments. The Authority is working closely with the Council of Energy Regulators¹¹ to support a whole-of-system approach to risks, issues and opportunities within the energy markets regulatory system. We will also continue to work closely with industry to understand and remove barriers to investment and innovation.

The industry participant survey highlighted that while we have maintained our performance when it comes to industry participant perceptions about innovation: only 18 percent of industry participants surveyed agreed the regulatory environment supports new business models and technology. Additionally, based on the survey's statements, 21 percent of participants surveyed agreed the current market settings have the ability to encourage innovation, so we know there is more work to do.

Our Power Innovation Pathway¹² launched in September 2024 is trialling a new approach to scale and grow the level of support the Authority provides to regulated parties, agencies, industry and consumers. This will further enable flexibility in the system and build a practical path forward for a secure and resilient electricity future.

10 www.ea.govt.nz/documents/4980/Open_letter_to_distributors_distribution_pricing_reform.pdf

11 Membership includes the Commerce Commission, Energy Efficiency and Conservation Authority, Gas Industry Company and Ministry of Business, Innovation and Employment.


12 For more information, see www.ea.govt.nz/industry/power-innovation-pathway/

Our impact measures for innovation flourishing

Impact	Measure	Desired trend	2021/22 result	2022/23 result	2023/24 result
The regulatory system accommodates new business models	Improved participant perceptions of the ability of the system to support rapid change	Increasing	28%	17%	Achieved: 18%
	Improved participant perceptions of the current market settings' ability to encourage innovation	Increasing	23%	21%	Maintained: 21%
	Number of sandboxes, trials, pilots in play across the network	Increasing	At 30 June 2022, there were two small-scale trials in play	At 30 June 2023, there was one small-scale trial in play	Maintained: At 30 June 2024, there was one small-scale trial in play
	Increased number of participants providing new services to consumers	Increasing	37%	42%	Not achieved: 37%*
The availability and transparency of industry data is continuously improved	Number of data transactions we have facilitated	Increasing	843,455 data transactions were facilitated in 2021/22	1.5m data transactions were facilitated in 2022/23	Achieved: 1.3m data files downloaded and 817k reports were viewed on the EMI website
	Number of new datasets we have provided access to	Increasing	We provided access to 6 new datasets in 2021/22	We provided access to 17 new datasets in 2022/23	Achieved: We provided access to 26 new datasets

Notes:

- * The result is based on the self-reported business practices of survey respondents. This is a quantitative question asked of respondents as to whether they have provided new services this year and the number who responded is less than last year. Sampling is random, so the participants and respondents will change year to year.



The guidance aims to create certainty in the sector. In turn, this will create better conditions for timely and efficient investment in networks and encourage more innovation.



Increasing efficiency of the distribution network

A priority for the Authority is enabling more flexibility in Aotearoa New Zealand's electricity system.

Flexibility is about allowing consumers to be rewarded for using their power differently. For example, owners with solar and battery systems can be paid for feeding surplus power into the grid; or pay cheaper rates by moving their power use to off-peak times.

Flexibility also has broader benefits for all New Zealanders by improving the efficiency of the electricity system. This saves consumers money by reducing the need to build more generation or upgrade network infrastructure to meet increasingly higher demand peaks.

Distributors have an important role to play in providing flexibility and supporting the development of the flexibility services market. Many distributors already use ripple control (eg, to control hot water) to reduce electricity demand during periods of peak demand. Other players are also starting to introduce new and novel ways to flexibly manage electricity consumption. Although the flexibility services market is still developing, we're making changes now to ensure the regulatory environment supports more investment and innovation into the market for the benefit of all New Zealanders.

In June 2024, we published draft guidance for distributor involvement in the flexibility service market and 84 people from across the sector joined our online workshop to discuss the guidance and ask questions. We are considering all feedback as we finalise the guidance to help ensure it is workable for those wanting to provide flexibility services and makes a difference to flexibility services competition.

The guidance aims to create certainty in the sector. In turn, this will create better conditions for timely and efficient investment in networks and encourage more innovation.

Once finalised, the guidance will also support the investment in and uptake of new technologies – such as EV chargers that respond to changes in generation or network capacity – to enable more flexible electricity system. We will monitor distributors' alignment with the guidance over time.

The guidance is one of many projects underway at the Authority that aim to support the growth of a thriving and competitive flexibility services market.

Relationship between our ambitions and outcome measures

The outcome measures below are used to assess performance against our statutory objectives, but also support the delivery of our ambitions. Further information on the outcome results is included in the next section on *Our performance against our statutory objectives*.

Outcome	Related outcome measure	Desired trend	2022/23 high level result	2023/24 high level result	Related ambition
Competition	Improved participant perceptions of the competitiveness in electricity markets	Increasing	Maintained	Not achieved	<ul style="list-style-type: none"> Low-emissions energy Consumer centricity Trust and confidence Thriving competition Innovation flourishing
	Improved consumer perceptions of the competitiveness of electricity markets	Increasing	Achieved	Not achieved	<ul style="list-style-type: none"> Consumer centricity Thriving competition
	Overall improvement across a suite of statistics on electricity market competition	Improving	Achieved	Achieved	<ul style="list-style-type: none"> Thriving competition
Reliability	Improved participant perceptions on the efficiency of supply reliability	Increasing	Not achieved	Not achieved	<ul style="list-style-type: none"> Low-emissions energy Trust and confidence
	Improved participant perceptions of the balance between the cost and reliability trade-offs	Increasing	Not achieved	Achieved	<ul style="list-style-type: none"> Trust and confidence Innovation flourishing
	Improved consumer perceptions of the reliability of electricity in New Zealand	Increasing	Maintained	Not achieved	<ul style="list-style-type: none"> Consumer centricity Trust and confidence
Efficiency	Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Improving	Achieved	Achieved	<ul style="list-style-type: none"> Low-emissions energy Consumer centricity Trust and confidence
	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Increasing	Maintained	Not achieved	<ul style="list-style-type: none"> Consumer centricity Trust and confidence Thriving competition Innovation flourishing

Outcome	Related outcome measure	Desired trend	2022/23 high level result	2023/24 high level result	Related ambition
	Improved consumer perceptions of the efficiency of electricity in New Zealand	Increasing	Achieved	Not achieved	<ul style="list-style-type: none"> • Consumer centricity • Trust and confidence • Innovation flourishing
	Overall improvement across a suite of statistics on electricity system and market efficiency	Improving	Achieved	Achieved	<ul style="list-style-type: none"> • Trust and confidence • Thriving competition
Protection of small consumers	Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply	Increasing	Baselined	Achieved	<ul style="list-style-type: none"> • Consumer centricity • Trust and confidence • Thriving competition
	Increased consumer access to independent information relating to their electricity supply	Increasing	Baselined	Achieved	<ul style="list-style-type: none"> • Consumer centricity • Trust and confidence • Thriving competition
	A sustained number of consumers switch electricity providers	Maintain at 20% or higher	Not achieved	Achieved	<ul style="list-style-type: none"> • Consumer centricity • Trust and confidence • Thriving competition
	An increased number of electricity retailers align to the Consumer Care Guidelines, covering a greater proportion of consumers	Increasing	Baselined	Achieved	<ul style="list-style-type: none"> • Consumer centricity • Trust and confidence

Our performance against our statutory objectives

Statutory objective 1: Competition

Competition helps ensure New Zealanders have choices about the retailer and brand they buy electricity from and drives costs down. It supports consumer mobility, fosters innovation and is a key enabler to delivering an electrified future. The best way to enable an affordable, electrified future is through a competitive and efficient electricity market, where investment and innovation flourish. This requires an evolution of the market.

The consumer perception survey highlighted that while consumers could choose among electricity providers, comparing different retail options and making a choice to switch remains difficult. Confusing pricing models, contractual obligations and rising prices regardless of switching made respondents think twice about changing providers. In 2024/25, we have work planned to improve the ability and support for consumers to compare and easily switch between retailers and plans. This will be achieved through consulted Code changes and an education campaign to help alleviate consumer concerns.

The industry participant survey revealed a view that it is difficult for new entrants to be competitive if they are not gentailers:

“ It is very difficult for new entrants that are not gentailers to compete with the current market participants, which have a natural hedge. There is very limited ability to hedge forward wholesale prices long-term - this is a role that government could take, and which would deliver huge benefit in terms of incentivising investment in renewable generation.¹³ ”

We have a multi-year work programme to support competition and address the recommendations from the Market Development Advisory Group’s (MDAG) report: Price discovery in a renewables-based electricity system. We are grateful to the MDAG for their comprehensive advice, input from submitters into our consultations, and the collaboration with our advisory and technical groups – both old and new. In response, we have developed a comprehensive work programme that will get us to Market 2.0, a wholesale electricity market in a renewables-based electricity system. Some recommendations are already underway, and the next stages started in the 2024/25 financial year. Specific activity focused on improving competition includes:

- investigating over-the-counter risk management contracts and whether these are creating a barrier to entry or expansion in the retail electricity market
- improving our collection and monitoring of retail data to provide better visibility of the retail market. This will enable us to identify potential issues, publish more insights on the electricity market’s behaviour and performance, and make well-informed policy decisions that will benefit consumers.

We are also progressing a risk management review to investigate whether the availability of over-the-counter risk management contracts, in the context of other risk management options, is creating a barrier to entry or expansion in the retail electricity market, and therefore harming competition. We acknowledge that we have more work to do to give confidence in the market and the level of competition. We will continue to monitor competition across the electricity markets as we ramp up our work to address it.

¹³ Industry participant survey, p 24:
www.ea.govt.nz/about-us/corporate-documents

Our outcome measures for competition

Outcome measure	How we measure results	Desired trend	2021/22 result	2022/23 result	2023/24 result
Improved participant perceptions of the competitiveness of electricity markets	Percentage of participants who agree with a range of statements on electricity market competitiveness	Increasing	36%	35%	Not achieved: 31%*
	Percentage of participants who agree that prices in the following electricity markets reflect the outcomes expected in a workably competitive market	Increasing	30%	29%	Achieved: 30%
Improved consumer perceptions of the competitiveness of electricity markets	Percentage of consumers who agree with a range of statements on electricity market competitiveness	Increasing	73%	75%	Not achieved: 74%**
Overall improvement across a suite of statistics on electricity market competition	<p>Overall improvement in the following statistics:</p> <ul style="list-style-type: none"> Retail market concentration (HHI statistic)*** Retail market share (CR4 statistic) Net pivotal analysis Hedge market concentration (HHI statistic) Concentration in the ancillary services¹⁴ market (HHI of reserves statistic) Number of retailers' approaches to consumers with offers to induce switching (measured by survey) 	Improving	3 out of 6 statistics remained low and stable over the year	5 out of 6 statistics either improved (3) or remained stable (2) over the year	<p>Not achieved: Four of the six statistics either improved (1) or remained stable (3) over the year.</p> <p>Net pivotal analysis wasn't completed in 2023/24 due to required updates in the vSPD system, which were completed at financial year-end.</p> <p>The number of retailers' approaches to consumers dropped to 41% – 8% lower than 2022/23.</p>

Notes:


* Feedback about competition included views that generators and gentailers didn't support competition.

** This measure is based on a range of measures which differed between 2023 and 2024. A new measure "I have enough information to know which electricity provider is best for me" was included in 2024. To be comparable to the prior year, three measures have been used to determine the result of 74%. If we include the new fourth measure captured in 2023/24 the result would be 71%.

*** The Herfindahl-Hirschman Index is a measure of market concentration, where decreasing HHI indicates decreasing market concentration, which can indicate greater competition. Further information can be found in Appendix A under competition.

Further details are in Appendix A: Outcome measures.

¹⁴ The system operator contracts individual participants to provide five services essential to maintaining the common quality of electricity supply. These are black start, over-frequency reserve, frequency keeping reserve, instantaneous reserve and voltage support.



By fostering competition, we aim to drive innovation and the delivery of better services, ultimately putting the power back in consumers' hands.



Comparison and switching support for consumers

We envision a future where consumers can take full advantage of a dynamic and competitive energy market, and are enabled to be active participants equipped with data and innovative tools to make informed decisions.

By fostering competition, we aim to drive innovation and the delivery of better services, ultimately putting the power back in consumers' hands.

Supporting consumers to easily compare and switch electricity plans is key to our vision for improved consumer mobility. In the complex environment of today's electricity market, consumers need information and tools to compare and choose a power plan that best suits their household's energy needs and budget.

In February 2024, we released a consultation paper that explored options to support consumers in comparing and switching electricity plans. Consumers asked the Authority for more from our comparison and switching support services.

We decided to focus on four key areas: procurement for a website service provider to be in place for a contract term beginning 1 July 2025; exploring alternative funding options for a price comparison website to increase trust in the service; implementing changes that will enhance the service; and broadening our support to go beyond the website to give consumers more control over their energy bills.

We can't rely solely on a website price comparison service to deliver the outcomes we seek. As part of our decision, we will explore other mechanisms to benefit consumers, like best plan notices, support for community advisors, standardised billing information and greater access to consumer data.

We look forward to delivering on the comparison and switching improvements for consumers. By lifting consumer mobility, we can empower consumers to manage their energy consumption and costs effectively, while fostering competition in the retail market.

Statutory objective 2: Reliability

The Authority works to achieve reliable and affordable day-to-day and long-term security of electricity supply for consumers. As a regulator, we aim to anticipate and respond to the changing dynamics of the electricity system and markets.

The electricity system must become highly adaptive to accommodate the natural fluctuations of intermittent renewable generation, like wind and solar. Increased coordination and information sharing will allow industry participants to quickly react to variations in intermittent generation. We can improve this by using the hybrid forecasting arrangement underway to improve the accuracy and frequency of intermittent generation forecasts in the spot market. Looking to our future programme of work, we are working to increase demand-side flexibility to better coordinate resources during peak demand periods. New reliability solutions are being developed based on submissions from our consultation into potential solutions for peak electricity capacity issues and lessons learned from the low residual situation on 10 May 2024.¹⁵

Demand response will also feature more in a highly renewable electricity grid. Demand response is where electricity consumers receive a financial incentive to reduce their consumption when demand is high. In 2023/24, we used the Code's rules around materially large contracts to review the multiple contracts between Tiwai Aluminium Smelter and several retailers.

The contracts remove a major source of market uncertainty – the energy consumed by the smelter is significant and equates to approximately 13 percent of national demand. This provides two key benefits to the market and ultimately the consumer. Firstly, increased confidence to generation developers and secondly, demand response levers the system operator can pull to reduce the smelter's electricity use and keep spot prices lower.

Respondents from the industry participant survey expressed concerns about New Zealand's ability to meet increasing demand during a dry year, including concern that the system would not be affordable, and would lack sufficient generation to account for unforeseen crises. This was supported by consumers, with only 39 percent of consumer survey respondents agreeing there was enough electricity to keep New Zealand powered in the future.

We have a variety of workstreams underway to support system reliability and address dry year demand concerns. We made our Winter 2023 Code amendments permanent and are progressing a package of six further improvements to support peak capacity issues. We are also working to improve investment signals for new reliability solutions, such as battery energy storage systems, to improve their flexibility and capability. Our goal is to ensure the Code and market settings continue to enable a reliable supply of electricity.

¹⁵ A low-residual situation is when the system operator notifies participants that the forecast schedules indicate periods with less than 200MW of generation remaining in the supply stack.

Our outcome measures for reliability

Outcome measure	How we measure results	Desired trend	2021/22 result	2022/23 result	2023/24 result
Improved participant perceptions of the efficiency of supply reliability	Percentage of participants who agree with a range of statements on electricity supply reliability	Increasing	71%	60%	Not achieved: 56%*
Improved participant perceptions of the balance between the cost and reliability trade-offs	Percentage of participants who agree with a range of statements on the cost and reliability trade-offs	Increasing	36%	32%	Achieved: 34%
Improved consumer perceptions of the reliability of electricity in New Zealand	Percentage of consumers who agree with a range of statements on electricity reliability	Increasing	62%	61%	Not achieved: 59%*
Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	<p>Overall improvement in the following statistics:</p> <ul style="list-style-type: none"> • Pricing in scarcity events reflects opportunity cost, as measured by case-by-case analysis • Effective management of dry years or emergency events, as measured by case-by-case analysis • Capacity and energy margins are within efficient bounds or are moving towards those bounds, as measured by the annual security assessment • Investigation of reliability events does not identify systemic issues, as measured by case-by-case analysis 	Improving	3 out of 4 statistics performed as expected	4 statistics performed as expected	Maintained: 4 statistics performed as expected

Notes:

* The main concerns of consumer survey respondents were about the lack of electricity supply when New Zealanders encountered peak demand during winter and the increasing demand for electricity from electric vehicles. Respondents wanted to see more planning for future reliability, including increased generation, investments in renewable energy and exploration of alternative energy sources.

Further information can be found in Appendix A under competition.

Statutory objective 3: Efficiency

The Authority is working hard to provide a predictable regulatory environment with robust rules and clear price signals to support increased electrification of heat and transport, and the development of renewable generation.

The electricity market has worked well for New Zealand for over 25 years. The market will continue to play a critical role with price signals attracting the right investment in the right place, at the right time and at the least cost to consumers.

The 2023/24 results show we have more work to do to improve participants' perceptions of the efficiency of our electricity market, transmission and distribution arrangements. Ongoing innovation and improvements will help create greater efficiency and translate into more affordable electricity and services for consumers.

We already have projects underway to achieve this, such as our work to improve the information available on the pipeline of new renewable generation developments. Improving the visibility of this pipeline, as well as connections of large-scale demand, battery energy storage systems and distribution network projects, will help with monitoring long-term security of supply. The additional information will help support monitoring of competitive outcomes and constraints to investment, as well as investor confidence and information for decision making.

Our outcome measures for efficiency

Outcome measure	How we measure results	Desired trend	2021/22 result	2022/23 result	2023/24 result
Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Percentage of participants who agree with a range of statements on the efficiency in electricity markets and transmission and distribution arrangements	Increasing	39%	39%	Maintained: 38%
Improved consumer perceptions of the efficiency of electricity in New Zealand	Percentage of consumers who agree with a range of statements on the efficiency of electricity in New Zealand	Increasing	59%	63%	Maintained: 62%
Overall improvement across a suite of statistics on electricity system and market efficiency	<p>Overall improvement in the following statistics:</p> <ul style="list-style-type: none"> • Robust futures prices • Dry year prices reflect storage levels, as assessed by case-by-case analysis • Exceptional prices are justified by underlying fundamentals, as assessed by case-by-case analysis • Reducing constrained-on compensation¹⁶ 	Improving	4 out of 4 statistics performed as expected	4 out of 4 statistics performed as expected	<p>Not achieved: 3 out of 4 statistics performed as expected</p> <p>2023/24 dry year prices were higher on average than prices seen in 2022/23 due to low inflows and tighter gas supply seen in 2023/24</p>

Further detail can be found in Appendix A under efficiency.

¹⁶ Constrained-on compensation is an amount paid to generators, if they are required by the system operator to generate during a trading period when the final price is less than the generator's offer price.

Statutory objective 4: Protection of small consumers

Protecting the interests of domestic and small business consumers is key to ensuring that all New Zealanders have access to the electricity they need. Our focus is on the interactions that electricity retailers and other industry participants have with these small consumers, where an imbalance of power could result in adverse outcomes for those consumers.

We continue to identify where and how this objective applies, (eg, in small businesses, and the relationship between electricity retailers and their customers), and to expand our monitoring of the retail market to ensure consumer interests are protected. As we progress this work, including mandating the Consumer Care Guidelines, we will establish baselines to measure future performance against.

Some of the measures are interim and may change as we grow our focus on protecting the interests of domestic and small business consumers.


Our outcome measures for protecting small consumers

Interim outcome measure	How we measure results	Desired trend	2022/23 result	2023/24 result
Consumers are empowered to make informed decisions about their electricity supply	<p>Increased consumer awareness of the independent services that support consumers to make choices and act in relation to their electricity supply</p> <ul style="list-style-type: none"> Percentage of consumers who have heard of the Powerswitch or Utilities Disputes services Percentage of consumers who have heard of the Powerswitch or Utilities Disputes services that also used those services 	Increasing	<p>38% baseline for percentage of consumers who have heard of the services</p> <p>33% baseline for percentage of consumers who have heard of and used the services</p>	<p>Achieved (net increase):</p> <p>44% of consumers have heard of the services</p> <p>30% of consumers have heard of and used the services</p>
	<p>Increased consumer access to independent information relating to their electricity supply</p> <ul style="list-style-type: none"> Number of Powerswitch sessions that progress to a results page Number of energy enquiries raised with Utilities Disputes 	Increasing	<p>486,000 Powerswitch pages sessions progressed to a results page</p> <p>9,665 energy enquiries were raised with Utilities Disputes</p>	<p>Achieved:</p> <p>516,568 Powerswitch page sessions progressed to a results page</p> <p>9,315 energy enquiries raised with Utilities Disputes</p>

Interim outcome measure	How we measure results	Desired trend	2022/23 result	2023/24 result
	<p>A sustained number of consumers switch electricity providers</p> <ul style="list-style-type: none"> Percentage of residential consumers that switch electricity providers during the year 	Maintain at 20% or higher	19% of residential consumers switched electricity providers during the year	<p>Achieved:</p> <p>20% of residential consumers switched electricity providers during the year**</p>
Electricity retailers provide a consistent and supportive standard of service to domestic consumers	<p>Increased number of electricity retailers align to the Consumer Care Guidelines, covering a greater proportion of consumers</p> <ul style="list-style-type: none"> Percentage of retailers self-assessed as aligning to the Consumer Care Guidelines* Percentage of residential ICPs covered by retailers' alignment to the Consumer Care Guidelines* 	Increasing	For 2021/22, 20 out of 38 retail brands (53%) self-assessed as fully aligning to the Consumer Care Guidelines and covered 67% of residential ICPs***	<p>Achieved:</p> <p>For 2022/23***, 37 out of 54 retail brands (69%) self-assessed as fully aligning to the Consumer Care Guidelines and covered 95% of residential ICPs****</p>

Notes:

- * The Consumer Care Guidelines describe actions that should be taken by retailers, as needed, to create safeguards for consumers. Alignment to the guidelines is currently voluntary and retailers are encouraged to self-assess their alignment with the guidelines and report to the Authority. We will mandate the Consumer Care Guidelines from 1 January 2025.
- ** The percentage of switches includes trader switches where the customer at the connection point has an existing contract with a trader (ie, they change retailers), and move in switches where the customer at the connection point does not have an existing contract (ie, they have moved into a new residence and set up a new contract).
- *** Alignment figures for 2022/23 were available in February 2024. Alignment figures for 2023/24 are expected to be available in February 2025.
- **** Total number of residential ICPs as at 30 June 2023 was from the EMI website. Also, retailers who supply electricity to domestic consumers were requested to provide an approximate number of ICPs they serviced as at 30 June 2023. Note, the EMI website has since been updated/backdated so numbers may differ to what was reported at the time.



The wānanga highlighted the wealth of mahi and knowledge available, and the potential for what can be achieved by working closely and collaboratively.



Consumer Care Guidelines, electricity consumer and industry wānanga

Our use of, and need for, electricity continues to grow and change. As a kaitiaki of electricity in Aotearoa, we want to safeguard a secure, resilient and reliable future for New Zealand, and ensure our people have choices in accessing the energy they need and have confidence the Authority has their best interests at heart.

In February 2024, we announced our decision to mandate the Consumer Care Guidelines by 1 January 2025 to improve protections for consumers. This decision underscores our commitment to consumers receiving the care and protection they need in a world where electricity is vital to achieving healthy and prosperous lives.

By mandating the Guidelines, we will create a solid regulatory framework that provides consistent and supportive protections for all consumers across the electricity sector. This is particularly important for those who need it most, such as medically dependent consumers and consumers facing hardship.

Tackling energy hardship and achieving energy wellbeing for consumers will require a range of support measures from across the system. Alongside the work we are doing internally for consumers, we are also collaborating externally to achieve better energy outcomes for people in New Zealand.

On 26 March 2024, the Authority facilitated a wānanga with representatives from the electricity sector, government agencies and consumer/community groups. It brought together diverse groups invested in improving energy wellbeing in Aotearoa to discuss different perspectives and experiences and look at potential initiatives that could achieve positive change on a larger scale. The intention was to provide an open forum for ideas to be explored and considered.

The wānanga highlighted the wealth of mahi and knowledge available, and the potential for what can be achieved by working closely and collaboratively. Several initiatives emerged throughout the day, and we will facilitate a second wānanga in 2024 to understand how we can continue to support this mahi. We look forward to communicating the outcomes of the second wānanga and continuing to work collaboratively with all those involved.

Our performance: Measuring our outputs

The Electricity Authority is an independent Crown entity and receives funding from the Crown each financial year from three appropriations within Vote Business, Science and Innovation.

The Crown funds the Authority through appropriations of public money. The Crown recovers the cost of this funding, up to the level of actual expenditure incurred, through a levy on electricity industry participants. Levies are charged to industry participants in accordance with the Electricity Industry (Levy of Industry Participants) Regulations 2010. These regulations are made on the recommendation of the Minister for Energy and are administered by the Ministry of Business, Innovation and Employment.

As set out in our *Statement of performance expectations 2023/24*, we measure these three appropriations against 14 performance measures.

	Our appropriations	Our functions
Operating appropriation	Electricity industry governance and market operations	Promote market development
		Monitor, inform and educate
		Operate the electricity system and markets
		Enforce compliance
		Protect the interests of small electricity consumers
Contingent appropriations	Managing the security of New Zealand's electricity supply	Addressing funding requests from the system operator for the management of security of supply events
	Electricity litigation fund	Taking enforcement action and defending cases against the Authority

Our appropriation performance

This section sets out our performance for each appropriation, including:

- what was intended to be achieved
- the scope of each appropriation
- the functions provided under each appropriation
- the 2023/24 performance measures, including desired results and targets
- the status and result for each performance measure as at 30 June 2024.

Statement of service performance

We have aligned to the reporting standard *Public Benefit Entity Financial Reporting Standard 48 Service Performance Reporting* (PBE FRS 48), which sets out the required standard for our non-financial performance information and reporting.

For the purposes of this standard, service performance refers to the information set out in the statement of performance in Part 5 of this annual report. The statement of performance relates to the measures and targets set out in our *Statement of performance expectations 2023/24*. However, we have also included disclosures on our impact and outcome measures from our *Statement of Intent 2021-25*, which are detailed in Part 4.

Our service performance reporting disclosures are included later in this section.

Performance measures used in the Estimates of Appropriation 2023/24

Some performance measures used in the *Statement of performance expectations 2023/24* are also used in the *Estimates of Appropriation 2023/24*.

How we report results for our output performance measures

Our *Statement of performance expectations 2023/24* sets out the performance targets for the outputs we will deliver in the year. Assessment of our performance targets are based on the following rating system:

Rating	Criteria	2023/24 result
Achieved	On target or better	10
Substantially achieved	Within 5% of the target	
Not achieved	More than 5% below the target	3
Not applicable	Data not available	1

This year, 10 out of our 14 output performance measures were achieved and three were not achieved. One measure was not applicable this year. More information on the three measures that did not achieve its targets and the one that was not applicable is included in the results sections for our appropriations.

Appropriation 1: Electricity industry governance and market operations

The 'Electricity industry governance and market operations' appropriation is the Authority's operational appropriation. Approximately 57% of this appropriation is used to fund the service providers that operate the electricity system and markets, with the remainder funding the Authority's own operating costs (30%) and commercial market-making scheme (13%).

What is intended to be achieved

This appropriation is limited to formulating, monitoring and enforcing compliance with the Electricity Industry Participation Code 2010, and other outputs in accordance with the statutory functions under the Electricity Industry Act 2010; and delivery of core electricity system and market operation functions carried out under service provider contracts.

Our functions under this appropriation

This appropriation funds our operations, including Board members' costs, the Rulings Panel, Security and Reliability Council, and advisory groups. It also funds the operation of the electricity system and market operations, and our five operating functions:

1. **Promote market development:** we are responsible for maintaining a responsive and robust regulatory environment that keeps up with innovation and new technologies to enable electrification and deliver better outcomes for consumers. Key tools include market facilitation measures and amendments to the Code.
2. **Monitor, inform and educate:** we monitor market behaviour and make data, information and tools available to help improve participation and understanding of the electricity markets by consumers and industry participants.
3. **Operate the electricity system and markets:** we are responsible for the day-to-day operation of the electricity system and markets through contracted service providers.
4. **Enforce compliance:** we monitor, investigate and enforce compliance with the Electricity Industry Act 2010, its Regulations and the Electricity Industry Participation Code 2010 by industry participants to create a fair and competitive market. We have an industry training programme to educate participants, share lessons learnt and help identify and resolve any systematic issues.
5. **Protect the interests of small electricity consumers:** we are responsible for protecting the interests of domestic and small business consumers in relation to industry participants supplying their electricity. This includes monitoring how electricity retailers and other industry participants deal with small consumers, including medically dependent and vulnerable consumers.

1. Promote market development

Our market development work promotes competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.

We have two key tools at our disposal to develop the market: amending the Code and adopting market facilitation measures. Market facilitation measures are the actions we can take short of amending the Code or recommending changes to regulations. This can include working directly with participants to develop desired results, education programmes, publication of guidelines, and publication of model agreements.

We use these tools to ensure market arrangements are appropriate for today's needs and flexible enough to enable tomorrow's innovations. Our market development cycle ensures market improvement initiatives are effectively implemented and the results assessed.

Within our *Annual Corporate Plan 2023/24*, we detailed 23 key work activities¹⁷ that contribute to our long-term strategy and promote market development. We exceeded our target with 83% of annual corporate plan activities achieving their annual outcomes by the end of the 2023/24 financial year. Some of the highlights from this reporting period include:

- We established the Electricity Authority Advisory Group and appointed 25 members to represent different consumer voices. This group will provide independent advice on our work programmes and test the practical implications of regulatory decisions with a strong focus on improving outcomes for consumers.

¹⁷ You can read more about the annual corporate plan project milestones completed in 2023/24 on our website at: [Our corporate documents | Electricity Authority \(ea.govt.nz\)](#).

- We created a generation investment dashboard summarising the data on current and expected new generation and published a list of investment projects which have been publicly announced, with information on each project's status. This information helps improve the visibility of the generation pipeline and improve information for industry decision making.
- We established a Distribution Connection Pricing Technical Group to ensure our work on connection pricing benefits from stakeholder knowledge, and to assist with testing the workability of related Code amendments.

In the 2024/25 financial year we changed our reporting and moved our planned activities out of the annual corporate plan into our *Statement of performance expectations 2024/25*. While some activities concluded after achieving their goals in 2023/24, other activities will continue into the next stages for the 2024/25 financial year. For example, the generation investment dashboard and consumer care reform.

Performance measures

Measure	2023/24 target	2022/23 result	2023/24 result
1. Planned activities that promote market development achieve published annual outcomes*	80%	Achieved: 89% (8 out of 9) planned activities achieved their published annual outcomes	Achieved: 83% (19 out of 23). We achieved our performance measure target of 80% of activities being on track. While this is six percentage points less than last year, we did nearly double the number of activities included for our 2023/24 work programme going from 12 to 23.
2. Our market development decisions and processes are lawful and appropriate**	Zero legal challenges that result in an Authority market development decision being overturned	Achieved: There were 0 successful challenges in 2022/23	Achieved: There were 0 successful market development challenges in 2023/24
3. Transparent, rigorous post-implementation reviews are conducted to establish whether Code amendments or market facilitation measures deliver intended benefits and impacts on market behaviour	One review completed	Achieved: We have published a review into the wholesale market information disclosure provisions, we reviewed wind offering, and we have reviewed the trading conduct provisions in a quarterly report for quarter one 2023	Achieved: We completed a review of the internal transfer price/retail gross margin regime. It will be published with the review of retail risk management at the end of 2024. In addition, we reviewed and published a regular review of the trading conduct provisions.

Notes:

* Planned activities that promote market development are published in our annual corporate plan and four-monthly progress reports are available on our website: www.ea.govt.nz/about-us/corporate-documents/

** Our decisions include market development decisions to implement Code amendments or market facilitation measures. These decisions can be disallowed, appealed or judicially reviewed – on the process used to reach the decision, and/or on the lawfulness, reasonableness or appropriateness of the decision itself.

2. Monitor, inform and educate

Our market monitoring, information and education work focuses on improving the availability of data, information and tools, and improving awareness and understanding of how the electricity market functions. Transparency and understanding are vital to give regulatory certainty and build trust and confidence in the market, the industry and the Authority.

Our monitoring function improves understanding by identifying behaviours that are potentially inconsistent with our objective. It also provides appropriate feedback into policy development.

We track and monitor all aspects of the sector. For example, over 2023/24, we:

- assessed offers and prices to check participants' compliance with the trading conduct rules and provided weekly trading conduct reports and quarterly market performance reviews
- conducted in-depth reviews and studies, published 'Eye on electricity' articles to provide insights about what's happening in the energy industry
- tracked and reported on final prices, retail market share and consumer switching on the EMI website¹⁸

- maintained databases and made analytical tools available (such as vSPD and JADE) to improve industry participants' own monitoring capacity
- proactively monitored areas of the Code where non-compliance is difficult to detect and could result in the greatest harm.

We started a project to improve our collecting and monitoring of retail data to enable us to have better visibility of the retail market. This increased visibility will support us to identify potential issues, publish more insights and make well-informed policy decisions that will benefit consumers.

We are working to expand our education work through a campaign to increase consumer understanding of competition and the ability to switch electricity providers. This will be a phased approach to build consumer mobility to encourage competition, innovation and continued market investment.

¹⁸ www.emi.ea.govt.nz



Performance measures

Measure	2023/24 target	2022/23 result	2023/24 result
4. The Authority regularly publishes robust monitoring reports	4 quarterly reviews published Regular trading conduct reports published	Achieved: We published 23 'Eye on electricity' articles, 4 quarterly reports (including the Q4 report for 2021/22), and weekly trading conduct reports	Achieved: We published 15 'Eye on electricity' articles, 4 quarterly reports (including the Q4 report for 2022/23), and weekly trading conduct reports
5. The Authority actively promotes understanding of its work and the electricity system to a wide audience*	Increase in activity across all public-facing channels	Achieved: Total website views: 922,495 Total social media followers: 3,842 (Twitter and LinkedIn)	Achieved: Total website views: 1,965,104 Total social media followers: 4,990 (X and LinkedIn)
6. Content on EMI is reviewed and revised as needed to maintain relevance**	Increase on prior year	Achieved: 5 new EMI reports were published*** 9 Tableau Public dashboards released for first time or substantially updated. Relevance of EMI is maintained as evidenced by 87,500 unique users in the 2022/23 year.	Not achieved: 2 new EMI website reports and 2 new data dashboards****
7. Data and analytical tools are made available to support the Authority's decision-making process	Increase on prior year	Not achieved: 24 new data tables published for use by analysts in Delta Lakehouse	Achieved: 34 new data tables for Authority analysts and 50 new data cloud views supplied for Authority staff

Notes:

* The Authority's public-facing channels include the Authority website www.ea.govt.nz, Market Brief newsletter, general media and social media. An increase in activity includes an increase in website views and social media followers.

** The EMI website www.emi.ea.govt.nz is the Authority's channel for publishing data, market performance metrics and analytical tools to facilitate effective decision making within the New Zealand electricity industry.

*** Data and analytical tools include Tableau and Delta Lakehouse to provide data that supports decision making at the Authority.

**** Increase on prior year not achieved as resource was diverted to higher-priority work.

3. Operate the electricity system and markets

We are responsible for the day-to-day, real time, efficient and reliable operation of the electricity system and markets. We contract a range of market operation service providers to operate the electricity markets efficiently. We focus on creating fit-for-purpose services that increase market efficiency, ensure effective market operation and facilitate market development.

We carefully manage service provider contracts to ensure services promote our statutory objectives and are delivered to the high standard expected by us and users of the services. The Authority is committed to working closely with all service providers, including the system operator. We meet with service providers regularly and closely monitor performance.

Performance measures

Measure	2023/24 target	2022/23 result	2023/24 result
8. Market operation service providers' (MOSPs) performance meets agreed standards and contract requirements, or a remedial plan is agreed and actioned by specified date*	Achieved	Achieved: Not all relevant performance standards were met, but remediation actions or processes have been agreed or are underway. A further end of year review will be conducted in August 2023.	Achieved: All relevant Code and contract performance standards were met, and a remedial plan is in place in cases where the Authority identified that improvement is required
9. Any significant issues in MOSP systems, as identified in audit processes, have a remedial plan agreed and actioned by specified date**	Achieved	Achieved: Audits of MOSPs have not raised issues of substantial concern, and remedial plans are or will be in place for those issues that were raised	Achieved: Audits of MOSPs have not raised issues of substantial concern, and remedial plans are or will be in place for those issues that were raised

Notes:

* MOSPs include the system operator and other service providers. Performance in this measure is focused on processes and procedures measured through the system operator annual performance assessment, and regular monitoring and reviews.

** Performance in this measure is focused on MOSP software systems and is measured through audits of the systems. For example, significant service provision issues identified in audit processes may include breaches of the Code and/or issues that have affected market confidence, and/or issues that have resulted in multiple complaints and/or a warning letter to the Chief Executive.

4. Enforce compliance

We monitor, investigate and enforce compliance with the Electricity Industry Act 2010, its Regulations and the Electricity Industry Participation Code 2010. The Authority's compliance and enforcement functions are critical for building trust and confidence in the sector and in the Authority.

Our compliance function aims to improve the performance of the industry through education of participants and helps us identify and resolve ongoing or systemic issues.

Our enforcement function aims to take appropriate and proportionate action where necessary, to ensure the Act, its Regulations and the Code are followed by electricity industry participants.

In 2023/24, we launched a new industry training programme aimed at providing industry participants with the tools to build their understanding of their regulatory environment and legal obligations. The primary focus is to increase the compliance of participants with the Code, through raising understanding and competency. We ran a series of webinars, an auditor's forum, published information on breach trends and produced guidance to help improve participants' policies and practices.

Performance measures

Measure	2023/24 target	2022/23 result	2023/24 result
10. Percentage of investigations decided within 12 months of the investigation being opened*	100%	Substantially achieved: 99% (158/160) cases were closed within 12 months	Not achieved: 96% (67/70) cases were closed within 12 months. Three cases older than 12 months remain open**
11. Our compliance decisions are lawful and appropriate***	0 legal challenges that result in a compliance decision being overturned	Achieved: Decisions made follow delegated decision authority	Achieved: Decisions made follow delegated decision authority

Notes:

* Investigations in this context include all fact-finding enquiries as well as formal investigations of alleged breaches of the Code.

** Two cases cannot be closed until remedial automatic underfrequency load shedding works have taken place at the premises of the participants involved.

*** The Compliance Committee makes decisions on alleged breaches of the Act, its Regulations, and the Code. It determines appropriate enforcement responses, whether settlements should be approved, or further investigation undertaken and makes recommendations to the Authority's Board about laying formal complaints with the Rulings Panel and instigating prosecutions with the Courts.

These decisions can be appealed or judicially reviewed – on the process used to reach the decision, and/or on the lawfulness, reasonableness, or appropriateness of the decision itself. A successful appeal or judicial review could overturn a compliance decision.

5. Protect the interests of small electricity consumers

We protect the interests of domestic and small business consumers in relation to the electricity supply to those consumers.

The work we do under this function contributes to our strategic outcome and additional statutory objective to protect the interests of small consumers, which came into effect in December 2022.

This year one of our areas of focus was to improve our approach to collecting and monitoring retail data and this project will continue into 2024/25. It will improve our visibility of the retail market and enable us to identify potential issues, publish more insights and make well-informed policy decisions that will benefit consumers.

Another significant project under this function is our decision to mandate the Consumer Care Guidelines. We achieved high engagement in our consultation with over 1,000 submissions, mainly from consumers. This highlighted how important a standard and consistent level of care is for consumers from their electricity retailers.

The intent of the Consumer Care Guidelines is to help retailers to:

- adopt behaviours and processes that foster positive relationships with domestic consumers
- help domestic consumers maximise their potential to access and afford a constant electricity supply suitable for their needs
- help domestic consumers minimise harm caused by insufficient access to electricity or by payment difficulties
- engage with medically dependent consumers - these customers must be identified and recorded as early as practicable and not disconnected for non-payment.

We have committed to mandate the Consumer Care Guidelines by 1 January 2025. To achieve this, we have worked with stakeholders on clarity, workability and the enforceability of the Guidelines.

Performance measures

Measure	2022/23 result	2023/24 target	2023/24 result
<ul style="list-style-type: none"> • Increased monitoring of and reporting on retail competition 	Consultation paper written, awaiting policy updates and Board approval	Establish regular monitoring and reporting of retail competition	Not achieved*

Notes:

* Although regular reporting has not yet been established, the project scope was broadened to include a wider range of retail data. The consultation paper has been written and approved for action in 2024/25.

How much it cost

**Actual 2022/23 \$000	Electricity industry governance and market operations appropriation	*Budget 2023/24 \$000	Actual 2023/24 \$000
92,073	Revenue from the Crown	100,813	100,842
92,073	Expenditure	100,813	100,842

Notes:

* The budget for 2023/24 corresponds to the Main Estimates of Appropriations for the year ending 30 June 2024.

** An in-principle expense transfer for \$0.56 million was confirmed at the March 2024 baseline update.

How we spent it

**Actual 2022/23 \$000	Electricity industry governance and market operations appropriation	*Budget 2023/24 \$000	Actual 2023/24 \$000
28,776	System operator – operating expenses	29,611	30,485
16,797	System operator – capital related expenses	17,454	17,857
45,573	System operator expenses	47,065	48,342
9,130	Service provider – market making	14,400	13,224
2,821	Service provider – clearing manager	3,128	2,974
1,875	Service provider – wholesale information and trading system	1,942	2,009
256	Service provider – pricing manager	–	–
956	Service provider – reconciliation manager	990	1,037
753	Service provider – registry manager	778	835
877	Service provider – financial transmission right manager	908	935
1,674	Service provider – depreciation and amortisation	1,199	1,416
2	Service provider – IT costs	24	11
18,343	Other service provider expenses	23,369	22,441
28,157	Authority operating expenses	30,379	30,061
92,073	Total expenses	100,813	100,843

Notes:

* The budget for 2023/24 corresponds to the Main Estimates of Appropriations for the year ending 30 June 2024.

Breakdown of operating costs by regulatory function	Actual 2022/23 \$000	Actual 2023/24 \$000
Appropriation income	92,073	101,843
Function costs		
Promote market development	14,350	13,424
Monitor, inform and educate	9,178	7,521
Operate the electricity system and markets	65,429	74,379
Enforce compliance	3,116	3,025
Protect the interests of small electricity consumers	–	2,494
Total function costs	92,073	100,843

Notes:

The Authority's costs have been attributed to its core regulatory functions. The underlying methodology allocates personnel and external costs which can be directly attributed to the appropriate function, but where this is not possible then those costs are treated as overheads eg, office rent costs or support staff costs. Overheads are then allocated across our functions based on an appropriate underlying measure eg, full-time equivalent employee numbers.



Appropriation 2: Managing the security of New Zealand's electricity supply

What is intended to be achieved

This appropriation is intended to achieve enhanced security of supply in the electricity system during periods of emerging or actual security situations.

Scope of appropriation

This appropriation is limited to the management, by the system operator (Transpower), of actual or emerging emergency events relating to the security of New Zealand's electricity supply.

The system operator can request funding from this appropriation to:

- increase monitoring and management responsibilities in the event of an emerging or actual security situation
- plan and run an official conservation campaign.

Managing the security of New Zealand's electricity supply is a multi-year appropriation for 2022-27. Expenses under this appropriation can only be incurred by the system operator.

Our functions under this appropriation

The system operator is responsible for ongoing security monitoring and emergency management.¹⁹ The security management functions of the system operator include the preparation of the Emergency Management Policy, which is incorporated into the Code by reference following the Authority's review and approval. The policy sets out the steps the system operator will take and encourage industry participants to undertake during an extended emergency.

Our primary role in the security of electricity supply is to ensure the Code promotes an efficient level of supply reliability. This includes specifying the functions of the system operator, how the functions are to be performed, and setting the requirements for transparency and performance. We also monitor the system operator's performance. This work is covered under the 'Promoting market development and operating the electricity system and markets' functions of the 'Electricity industry governance and market operations' appropriation.

Our role around this appropriation is limited to addressing requests from the system operator to use these funds. Our approval of any request is subject to an agreed process and criteria. The process requires the system operator to provide evidence of an actual or emerging security event, and to describe the actions it intends to take using the funds and how the use of these funds will be monitored. Agreeing this information in advance can help us to assess the effectiveness of the actions and the funding during and after an event.

The system operator would seek our approval for funding from this appropriation on a case-by-case basis when it considers increased monitoring or security management actions are justified. However, the system operator can, acting on a good faith basis, incur up to \$300,000 of costs in this area without prior approval if it is not reasonably practicable to seek that approval.

¹⁹ Section 8(2) of the Electricity Industry Act 2010 states that as well as acting as system operator for the electricity industry, the system operator must (a) provide information and short- to medium-term forecasting on all aspects of security of supply; and (b) manage supply emergencies. Further information is available at: www.transpower.co.nz/system-operator/our-system-operator-role/security-supply-and-capacity

Performance measures

Managing the security of New Zealand's electricity supply contributes to our reliability outcome.²⁰ The effective management of dry years and emergency events, as measured by case-by-case analysis, is one of the ways we use to measure whether there are efficient levels of reliable electricity supply.

If the system operator seeks funding under this appropriation to manage a dry year or emergency event, how it uses that funding would be reviewed as part of the subsequent analysis. The results of the review would be published on our website and a summary reported in our annual report.

Given that the relevant outcome and function performance measures are already captured elsewhere, the measures below are limited to those that demonstrate we have fulfilled our obligations for this appropriation.

Measure	2023/24 target	2022/23 result	2023/24 result
12. Electricity Authority decisions relating to system operator requests for access to funding are made in accordance with the agreed process and criteria	Achieved	N/a. The Authority did not receive any applications for funding during the 2022/23 year	N/a. The Authority did not receive any applications for funding during the 2023/24 year

Notes:

We have an agreed process and criteria for the system operator to follow. For example, correct documentation is provided; appropriate sign off by system operator management; evidence that there is an actual or emerging security event; intended actions are clearly described; and monitoring and reporting are specified.

Actual 2022/23 \$000	Managing the security of New Zealand's electricity supply appropriation*	Actual 2023/24 \$000	**Budget 2023/24 \$000
–	Revenue from the Crown	–	1,200
–	Expenditure	–	1,200

Notes:

* This is a five-year appropriation of \$6 million until 2027. This appropriation is contingent in nature and is not routinely used. To provide consistency with the appropriations contained in the Government's Estimates documents for Vote Business, Science and Innovation, annual budgeted amounts have been included. However, as it is not routinely used, no amounts in relation to this appropriation have been included in the 2023/24 budgets within the other financial statements contained in this annual report.

** The budget for 2023/24 corresponds to the Main Estimates of Appropriations for the year ending 30 June 2024.

Appropriation 3: Electricity litigation fund

What is intended to be achieved

This appropriation is intended to achieve assurance that the Authority can participate in litigation effectively and without delay.

Performance measures

Measure	2023/24 target	2022/23 result	2023/24 result
13. The electricity litigation fund is used in accordance with the agreed criteria*	Achieved	Achieved. During 2022/23, the fund was used in accordance with agreed criteria for the costs and expenses	Achieved. During 2023/24 the fund was used in accordance with agreed criteria for the costs and expenses

Notes:

* The criteria are set out in our output agreement with the Minister for Energy.

In 2023/24 the fund was primarily used to respond to two challenges to Electricity Authority decisions:

- Haast Energy Trading Limited and Electric Kiwi Limited appealed against the Authority's decisions on a claim of an undesirable trading situation and a pricing error, arising from the 9 August 2021 grid emergency. The Court upheld the appeals against the Authority's decision to decline the pricing error claim the appellants made in relation to trading periods 39-42 on 9 August 2021. The Court's decision on the pricing error claim was that scarcity pricing was incorrectly triggered, which should be corrected. The undesirable trading situation appeal was dismissed on the basis that it is moot, given the finding on the pricing error appeals. The Authority paid costs of \$60,000.00.
- A judicial review application was brought by Buller Electricity Limited against the Authority's decision to include a reclassification discretion in the transmission pricing methodology. Following a hearing in early August 2023 the Court dismissed the claims, both the cause of action against the Authority and Transpower. The Authority was paid

Scope of appropriation

This appropriation is limited to meeting the cost of litigation activity undertaken by the Authority arising from it carrying out its functions under the Electricity Industry Act 2010.

Our functions under this appropriation

Our functions under this appropriation include defending judicial review and appeal cases taken against us and taking enforcement action against participants under our compliance function.

costs of \$70,321.63. As at the end of the 2023/24 financial year, Buller appealed the Court's decision, and the Authority is waiting for a hearing date to be set.

The fund was also used to retain external counsel to lodge a complaint to the Rulings Panel:

- The Authority referred a formal complaint to the Rulings Panel in relation to Transpower New Zealand Limited, in its role as system operator. The Authority considers that the system operator breached clause 30.1B of the Policy Statement,²¹ and accordingly the Code, by failing to correctly apply security constraints in the modelling system between 28 January 2022 and 13 April 2022. Submissions are being prepared and are expected to be filed early in the 2024/25 financial year.

²¹ The Policy Statement incorporated by reference into the Electricity Industry Participation Code 2010 for the purposes of clause 8.12B of the Code.

How much it cost

Electricity litigation fund appropriation*	Actual 2022/23 \$000	Actual 2022/23 \$000	Budget 2023/24 \$000
Funded by revenue from the Crown	869	178	1,500
Total litigation expenditure	869	178	1,500

Notes:

* This appropriation is contingent in nature and to provide consistency with the appropriations contained in the Government's Estimates documents for Vote Business, Science and Innovation. Annual budgeted amounts have been included. No amounts in relation to this appropriation have been included in the 2023/24 budgets within the other financial statements contained in this annual report.

Service performance reporting disclosures

Statement of compliance

The service performance statements of the Authority have been prepared in accordance with the requirements of the Crown Entities Act 2004, which includes the requirement to comply with New Zealand generally accepted accounting practice.

The Authority is a Tier 1 entity, and the service performance statements have been prepared in accordance with Public Benefit Entities reporting standards, including PBE FRS 48 which applies to non-financial performance reporting.

Selecting performance measures

The Authority's performance measures are selected to reflect the work we do to deliver our statutory functions alongside our strategic ambitions and statutory objective.

We regularly review our performance measures to ensure they are fit for purpose and align to our strategic framework. For 2023/24, we reviewed the measures in our *Statement of performance expectations 2023/24* to ensure they were relevant, understandable, timely, comparable, verifiable and faithfully represented our performance. This review meant that some previous performance measures were removed or amended to better represent the Authority's performance going forward.

We have organised our service performance information by operating function and selected measures for each that build a picture of our performance within that function.

Together these measures contribute to our overall performance story.

Where new performance measures have been added, these were selected to provide a more robust assessment of our performance and reduce duplication across our suite of performance measures.

Judgements and assumptions made in our output performance measures

Content-based performance measures

The number of content-based items the Authority produces in a year (eg, content on our websites, publications, data and analytical tools) may fluctuate from year to year, depending on our activities. For example, we no longer collect analytical data from X (formerly Twitter) to capture outreach statistics.

Contract management for market operation service providers

Agreed levels of performance are included in our contracts with market operation service providers. Performance metrics are reported monthly or quarterly, with a year-end review as part of the contract management plans. Where performance is not at the agreed levels, remedial plans and actions are put in place and reviewed at monthly service provider meetings.

Similarly, audits of market operation service providers are conducted by approved Authority auditors (such as the annual software audits) or procured by specialist auditors (such as cyber security audits). Audit recommendations and/or remedial plans and actions are reviewed at monthly service provider meetings.

Judgements and assumptions made in our impact and outcome measures

Survey-based measures

To support open and honest feedback, the Authority engaged an external provider, AK Research and Consulting (AKR) to independently administer an Industry participant survey and a Consumer perception survey. AKR received the responses in confidence and anonymised the data before providing the results to the Authority.

For both surveys, we assume that responses from within the sample are reflective of the broader population. It is not practicable or realistic to survey the entire population sample or to expect a 100 percent response rate. These surveys were run during May and June 2024.

Industry participant survey measures

A random sample of participants and stakeholders was used to remove bias. The survey was voluntary, which means there was a level of self-selection in the survey results. A 25 percent rate was targeted, which aligns with survey best practice and this year we achieved 28 percent. Results reflect the respondent's perspective as a representative of their organisation and these perceptions may not necessarily align with the views of the Authority. Respondents' perceptions can also be influenced by external factors, including media interest, political views or weather events.

Consumer perception survey measures

AKR used an existing database to survey a nationally representative sample of domestic electricity consumers in New Zealand over the age of 18. Consumer perceptions can be influenced by external factors, including media interest, political views or weather events.

Process-based measures

We have some measures that rely on a specific process being carried out if a certain event happens eg, the customer transfer process in the event of a trader default, or market services being resilient to adverse events. Where the event does not happen in the relevant year, we may use process reviews, service provider audits, and system or business continuity testing to determine the result for the measure. If this is the case, we provide commentary on this alongside the measure result.

External factors impacting results

From time to time, external factors may impact performance measure results. These can range from changes in government policy; domestic and international economic shifts; extreme weather and climate change-related events; and more. Where relevant, we note these external factors alongside the performance results.

Links between financial and non-financial information

Financial and non-financial information work together to create a complete picture of our overall performance in the year. To be able to deliver our core functions, and achieve our outcomes and ambitions, the Authority relies on our appropriation funding through the levy on electricity industry participants.

Delivery of our core functions supports the progression of our long-term strategic ambitions and statutory objectives.

One of our core functions is to operate the electricity system and markets and this makes up a significant proportion of our annual expenditure. Market operation service providers and the system operator make up 69 percent of our main operational appropriation, the 'Electricity industry governance and market operations'. The remaining 31 percent funds the Authority's day-to-day operations to promote market development; monitor, inform and educate; enforce compliance; protect the interests of small electricity consumers.



Our governance

Our Board

The Electricity Authority is governed by a Board of five to seven members, each appointed by the responsible minister, the Minister for Energy. The Board has the authority to exercise the Authority's statutory powers and perform its functions. It also sets the Authority's strategic direction and is responsible for its effective governance, accountability and performance.

In addition to the strategic objectives of the organisation, the Board has a clear focus on effective and efficient management of the Authority, addressing the issues raised in the Strategic Baseline Review and meeting the expectations of Crown entity boards to:

- drive greater value for money and achieve better results for the people they serve
- fully understand and account for cost and performance drivers against key outcomes
- continuously improve the responsiveness and efficiency of the services and activities the Authority delivers.

The Board delegates the day-to-day management of the Authority to the Chief Executive and senior leadership team.

The Board is accountable to Parliament and reports to the Minister for Energy. The Board undertakes an annual performance self-evaluation and shares the results with the Minister's representatives.

Board members

Members of the Board on 30 June 2024 were Anna Kominik (Chair), Allan Dawson, Dr Cristiano Marantes, Erik Westergaard, Lana Stockman, and Paula Rose QSO, with an even gender balance. All Board members are based in New Zealand and bring a wealth of experience and expertise across regulation and the electricity sector.²²

This year has seen change in the Authority's governance with two new Board members, Anna Kominik, who was appointed as Chair from 13 July 2023 and, Dr Cristiano Marantes.

²² The biographies of Board members are available at: www.ea.govt.nz/about-us/our-people/

Board member	Term start	Term expiry
Allan Dawson	18 April 2017	8 October 2024
Lana Stockman	1 June 2017	8 October 2024
Paula Rose	16 January 2023	15 January 2028
Erik Westergaard	16 January 2023	15 January 2028
Dr Cristiano Marantes	1 July 2023	12 July 2028
Anna Kominik (Chair)	13 July 2023	30 June 2028

Board committees

The Board has four committees: Audit and Finance, Compliance, Market Operations and Transmission Pricing Methodology.

Committees	Description
Audit and Finance Committee	<ul style="list-style-type: none"> • Advises on the quality and integrity of our financial reporting and oversees and assesses the internal audit process. • Considers whether appropriate governance, policies and operating processes are in place to identify and manage risk.
Compliance Committee	<ul style="list-style-type: none"> • Makes decisions on alleged breaches of the Electricity Industry Act 2010, its regulations and the Electricity Industry Participation Code 2010. • Determines appropriate enforcement responses and whether settlements should be approved or further investigation undertaken. • Makes recommendations to the Board about laying formal complaints with the Rulings Panel and instigating prosecutions.
Market Operations Committee	<ul style="list-style-type: none"> • Oversees the governance, performance and administration of our major contracts, including our market operation service providers. • Sets strategic directions and oversees major contract procurement processes and procedures.
Transmission Pricing Methodology Committee	<ul style="list-style-type: none"> • Advises the Board on policy decisions, issues, and Code amendments relating to the transmission pricing methodology. • Ensures policy changes meet the evolving needs of the electricity sector by encouraging efficient investment and ensuring a level playing field for new and emerging technology.

Board and committee attendance

In 2023/24, the Board held 22 meetings, including 12 regular meetings, four strategy days and six additional Board meetings to respond to various matters and 12 committee meetings.

Board member	Regular Board meetings	Additional Board meetings	Strategy days	Audit and Finance Committee	Compliance Committee	Market Operations Committee
Allan Dawson	12/12	6/6	4/4	N/a	4/4	5/5
Lana Stockman	12/12	6/6	4/4	3/3	N/a	5/5
Paula Rose	12/12	6/6	4/4	3/3	4/4	N/a
Erik Westergaard	12/12	5/6	4/4	3/3	4/4	N/a
Dr Cristiano Marantes	12/12	6/6	4/4	N/a	N/a	N/a
Anna Kominik	11/12	6/6	4/4	N/a	N/a	5/5

Actual attendance/eligible to attend.

The Transmission Pricing Methodology Committee was established in April 2024 and did not meet in the financial year ending 30 June 2024.

Board interests

Board members are required to disclose any interests under the Crown Entities Act 2004, as well as any conflicts caused by their background or other interests. At 30 June 2024, no Board members held permissions to act despite being interested in a matter.

Board self-evaluation

The Board undertakes an annual performance self-evaluation and shares the results with the Minister's representatives.

Advisory and technical groups

Advisory and technical groups provide additional support to our Board.

The Electricity Industry Act 2010 sets a requirement for us to establish the Security and Reliability Council and one or more other advisory groups to provide independent advice on the development of the Code and on market facilitation. It also requires us to publish a Charter for Advisory Groups. From time to time the Authority also establishes technical groups to support particular workstreams.

Advisory and technical groups	Scope of advice	Meetings 2023/24
Electricity Authority Advisory Group	Work programme and practical implications of regulatory decisions for consumers and stakeholders. The Group was established in February 2024.	0
Market Development Advisory Group	Development of the Code and market facilitation measures, focussed on matters relating to the evolution of the 'machinery' of the electricity market. Fixed term ended in February 2024.	*
Security and Reliability Council	Performance of the electricity system, the system operator, and on reliability of supply issues.	4
Common Quality Technical Group	Common quality requirements contained in Part 8 of the Code.	5
Network Connections Technical Group	Potential amendments to the Code to make network connections quicker, easier and more consistent.	4
Distribution Connection Pricing Technical Group	Knowledge is captured in the Authority's work on connection pricing to assist with testing the workability of potential Code amendments. Group appointed in June 2024.	0
Standing Data Formats Group	New file formats and any changes to file formats required for the exchange of information. This group is in recess.	0
Switch Technical Group	Amendments to the switching process to ensure it remains fit for purpose. This group is in recess.	0

* MDAG met on an ad-hoc basis as necessary to deliver the report. As an independent advisory group, the Authority did not attend every meeting.

The Rulings Panel

The Rulings Panel is an independent dispute resolution and disciplinary body that helps enforce the Electricity Industry Participation Code 2010. It determines breaches, hears appeals against certain decisions and resolves disputes under the Code.

The Rulings Panel was established under the Electricity Governance Regulations 2003. The Electricity Industry Act 2010 sets out its membership, functions and funding arrangements.

Members are appointed by the Governor-General in accordance with a recommendation from the Minister for Energy after consultation with the Minister of Justice and the Authority. In 2023/24, members of the Rulings Panel were Mel Orange (Chair), Matthew Dunning KC, Paul Webber and Lee Wilson.

Our operational processes

Planning and reporting

The Crown Entities Act 2004 sets out our major planning and reporting requirements, including preparing and publishing a statement of intent, statement of performance expectations and annual report.

In 2023/24, our progress against our Statement of performance expectations 2023/24 and Ministerial letter of expectations was reported in four-monthly increments throughout the year. This changed to quarterly reports from July 2024.

It is a requirement of Section 129 of the Electricity Industry Act 2010 for the Authority to consult on our proposed appropriations each year before we submit our request for funding to the Minister for Energy. This feedback also informs our strategic planning for the year.

Value for money

As a Crown entity, we are critically aware of the need to demonstrate value for money, with the responsible management of our assets, finances, capital expenditure and investments. The Authority is focused on working smarter and more efficiently. We are strengthening our commercial management, reducing our consultancy and contractor costs, lowering staff turnover and improving our technical capabilities.

We will continue to monitor and report on how we are delivering value for money as well as our progress implementing the Strategic Baseline Review²³ recommendations in our quarterly reports to the Minister for Energy.

We aim to introduce smarter systems and processes, help increase understanding around our cost drivers and performance, and ultimately improve our efficiency and responsiveness. In 2024/25 we will develop a regulatory strategy to guide how we prioritise our work programme to drive greater value from the funds we receive and the assets we manage.

²³ In 2022/23 a strategic baseline review was undertaken of the Electricity Authority in the context of the Authority's most recent request for levy funding increases.

Risk management

It is the responsibility of everybody at the Authority to manage our risks. As such we are committed to ensuring effective risk management practices are embedded in our ways of working. This enables us to be better coordinated and make informed planning decisions to enable enhanced performance and improvement within the Authority.

The Board is responsible for establishing and overseeing the risk management framework which is supported by underlying systems, structures, policies, procedures, processes and people.

The Authority has developed a risk appetite statement which sets out the Board's expectations regarding, for each risk category, the maximum level of risk the Authority is willing to accept in that category. This will guide the Authority in pursuing its strategic objectives and operating plans. The risk appetite statement will be updated on an annual basis.

The Board has delegated authority to the Audit and Finance Committee to develop and monitor compliance with the risk management framework. The Committee reports regularly to the Board on its activities.

The Authority operates within a three lines-of-defence model to embed a culture where everyone is responsible for risk management:

1. The wider organisation is responsible for day-to-day ownership of risks, controls and accountability for the implementation and ongoing adherence to the risk management framework.
2. The Operational Risk and Assurance team provide independent oversight of the Authority's risk profile and risk management framework.
3. Internal audits providing an independent assessment on the appropriateness, effectiveness and adequacy of the risk management framework. In addition, the audits provide assurance on the effectiveness of the control environment.

Directions issued by the Minister

No new directions were given to the Authority by a Minister during 2023/24.

The following directions, given jointly by the Minister for the Public Service and the Minister of Finance under section 107 of the Crown Entities Act 2004, apply to the Authority and remain current:

- Direction regarding Procurement Functional Leadership dated 22 April 2014. This direction requires the Authority to apply the Government Rules of Sourcing.
- Direction to support a whole of government approach to the New Zealand Business Number dated 21 August 2018. This direction requires the Authority to implement the New Zealand Business Number in accordance with the direction.



Our people and organisational capability

Designing and operating New Zealand's electricity system takes great people. Our team is made up of passionate kaimahi who are led by our Board, Chief Executive and senior leadership team.

Our strategic capabilities

Our work demands a high level of capability in areas including policy, market analysis, compliance management, communications and engagement and other corporate functions. These capabilities ensure the setting and enforcement of rules that effectively govern New Zealand's electricity industry.

The five strategic capabilities outlined in our Statement of intent 2021-25 provide the foundation for our internal priorities and reflect what we want to be known for.

Listening and empathy

To deliver value and the best outcomes for the breadth of different electricity consumers, we need to understand who our consumers are, their experiences, perspectives and needs. This understanding can only come from increased curiosity and genuine, open listening. We also need to exercise this capability with the regulation community. We will adopt a customer-centred approach to ensure the regulatory platform better serves people, businesses and the nation.

Purposeful connection

To grow trust and confidence, build knowledge and progress the electricity sector, we will deepen our connection to those we serve. This includes collaborating with and learning from electricity consumers, tangata whenua, the regulated community and agencies. We also need to broaden our networks internationally to learn from other electricity industries and regulators. We aim to be clear and purposeful about who we engage with and why, and actively build relationships for the benefit of consumers. We listen and demonstrate we have heard, and better communicate sector success.

Inspired culture

To achieve better long-term outcomes for New Zealand, our internal talent needs to grow and thrive. We will invest in our culture, diversity and capability, and provide opportunities for collaboration and progression so our people feel valued and empowered to do their best work. Their experience and commitment are the foundation the Authority will transform from, grow our professional maturity and enhance the craft of our regulation.

Transformative mindset

To meet the pace of change and drive innovation, we need to be creative, fast, bold, practical and flexible. This means choosing processes and methodologies that support responsiveness, agility and better solutions. We will improve our governance, be more pragmatic, experiment, iterate and scan horizons for proactive solutions – both within and outside the sector, here and overseas.

Impactful delivery

To achieve our intended outcomes, we need to be more efficient and strategic – prioritising and aligning our efforts and using more streamlined, transparent processes. We will invest in systems and tools for success, better leverage internal knowledge, resources, data and technology, and apply a continuous improvement mindset to all.

Our people

Our people are the key to our success. The Authority places strong emphasis on attracting and retaining a diverse workforce that can deliver against its strategic ambitions and deliver our statutory objectives. Our workforce strategy focuses on diversity, equity, inclusion, flexible and hybrid working options and individual development plans.

Our Kia Toipoto Pay Equity Plan was published in 2023 and will be updated annually and demonstrates our commitment to help close pay gaps across the public service. Our gender pay gap continues to decrease.

We value and embrace diversity. This year guidance from Diversity Works and Pride Pledge assisted us on a journey of respectful inclusion as we built a more culturally, age- and gender-diverse workforce and knowledge base. This includes ongoing Rainbow 101 Awareness training, Trans 101 Awareness training, supporting neurodivergence in the workplace and working with kaimahi to support further employee-led networks.

We place high importance on developing kaimahi to their potential. Each year, our people have access to individual training budgets to support their professional and personal development. People leaders also receive regular support and guidance from their People and Capability Business Partners to better support and lead our people.

During the year, we embedded a yearly rolling planner that focuses on one of our 12 organisational behaviours each month, tying them to related activities and leadership guidance. The goal is to foster a positive workplace culture that encourages diversity and develops our emerging leaders.

People profile

As at 30 June 2024, the Authority had 124 permanent and nine fixed-term employees. At management level (senior leadership team and people managers), the gender split was 56 percent male and 44 percent female.

Employer of choice

Our people and capability processes are based on the principles of being an 'equal opportunity' and 'good employer'. We regularly review our internal processes and policies to ensure we are providing an equal opportunity to prospective employees and support the physical and mental wellbeing of our people.

To help build a positive culture, this year we ran social events aligned with national events, such as Pink Shirt Day, ANZAC day, Pride month, Samoan Language week, New Zealand Sign Language week, Movember and Mental Health Awareness week. We also continued our monthly staff awards to recognise kaimahi achievements, celebrate success and show how we live our organisational values and behaviours.

This year, we divided our kaimahi engagement surveys into one specific topic each quarter. This allowed for a more frequent and detailed feedback loop between staff and management to inform areas of improvement and opportunity.

Leadership, accountability and culture

Our senior leadership team and people managers, supported by our People and Capability team, are accountable for ensuring we have the best possible capability among our people.

Our focus on the respectful sharing and exchange of views within and across teams has provided an environment where people feel better equipped to contribute to the important decisions that deliver better outcomes for consumers and the sector. Our organisational behaviours underpin our desired culture, reflecting how we engage and collaborate as an organisation and are aligned with our values of integrity, openness, excellence, boldness, and our people.

Capability, structure and agility

Ensuring we achieve our outcomes requires organisational structures that are fit for purpose. We onboarded new staff across teams to support the key priorities of the Authority. This continues to ensure we have the right people in the right places at the right time.

Retention

The Authority’s turnover rate was 16% in 2023/24, down from 29% in 2022/23 and 39% in 2021/22.

We work hard to manage staff retention and initiatives underway to retain our kaimahi include:

- increasing leadership capabilities
- development pathways and progression, as well as succession planning
- continuing staff wellness initiatives and activities.

Figure 2: Length of service

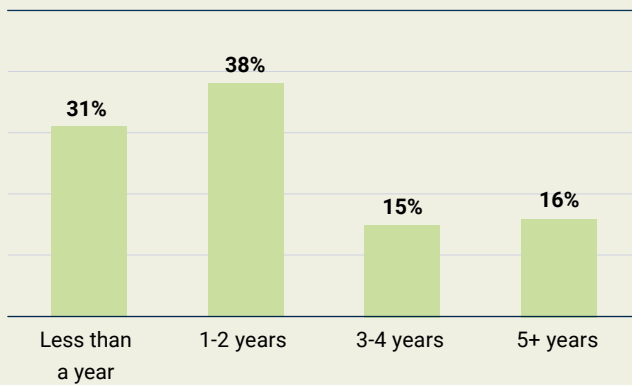


Figure 3: Management diversity

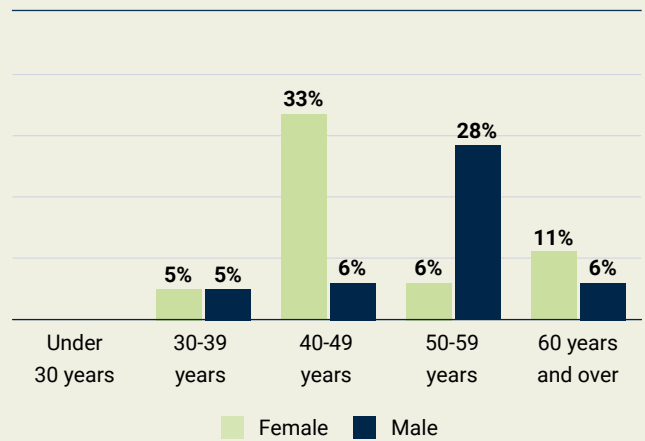


Figure 4: Age diversity

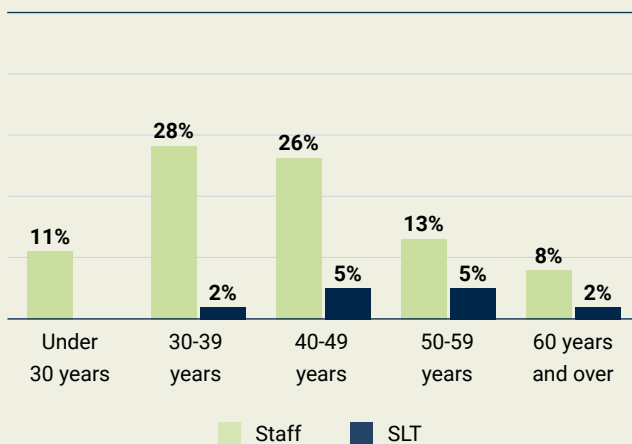
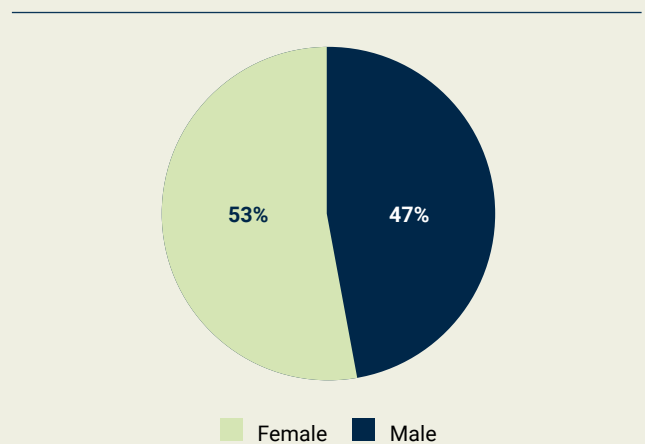


Figure 5: Gender diversity



Climate change and greenhouse emissions

As an independent Crown entity, the Authority is not mandated under the Carbon Neutral Government Programme. However, we are committed to measuring and reporting our greenhouse gas emissions.

We have identified two areas as our main sources of greenhouse gas emissions – travel and the energy we purchase. As we grow our capability in this area, we may identify further emissions sources and, where practicable, we will include these in future reporting.

Air travel accounted for 83% of the Authority’s emissions for the year. Air travel is considered a Scope 3 or indirect emission ie, it is an emission that occurs ‘because of the activities of the organisation, but generated from sources that it does not own or control’.

All greenhouse gas emissions are expressed as tonnes of carbon dioxide equivalent (tCO₂-e). These have been calculated using reports generated by our vendors and the Ministry for the Environment’s Measuring Emissions: A Guide for Organisations.²⁴

Overall, in 2023/24 the Authority had 48.99 tCO₂-e of Scope 2 purchased energy and Scope 3 emissions. This was down from a total of 67.69 tCO₂-e in 2022/23, largely due to a 30 percent decrease in air travel.

Our intention is to see a reduction in our emissions over time. In 2023/24 we saw a decrease in greenhouse gas emissions in every area, apart from accommodation.

We will look to improve our reporting to improve accuracy and scope. We will also build an improved baseline as we collect more data to make comparisons against.

²⁴ www.environment.govt.nz/publications/measuring-emissions-a-guide-for-organisations-2024-detailed-guide

Purchased energy

Our purchased energy is in the form of electricity used to power our offices. In 2023/24, we purchased 47,856 kilowatt hours (kWh) of energy, emitting 3.49 tCO₂-e representing 7% of our total emissions.

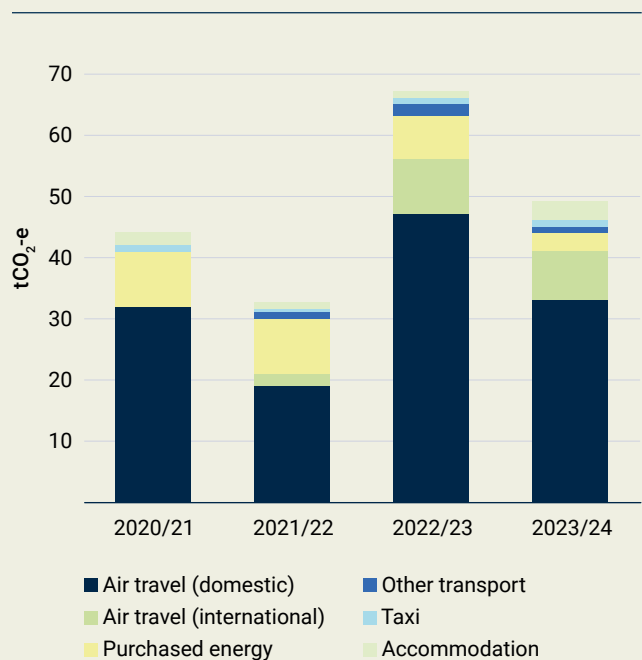
Air travel

The Authority flew approximately 153,477 km domestically and 39,788 km internationally in 2023/24. Emissions from air travel in 2023/24 were 33.16 tCO₂-e for domestic air travel and 7.72 tCO₂-e. Emissions from air travel have decreased by 28 percent from the previous year. Our emissions from international flights decreased in 2023/24 as all Board members are now based in New Zealand compared to previous years.

Other travel

Hotel accommodation, taxi use and other travel-related emissions comprised of 9% of measured emissions in 2023/24 (4.62 tCO₂-e).

Figure 6: Total greenhouse gas emissions per year



Financial statements

These financial statements report actual results against budget information in the Authority's *Statement of performance expectations 2023/24*.

These financial statements are provided in accordance with Section 151 of the Crown Entities Act 2004.

Statement of comprehensive revenue and expense

for the year ended 30 June 2024

Actual 2022/23 \$000		Note	Actual 2023/24 \$000	Budget 2023/24 \$000
92,942	Funding from the Crown	2	101,021	100,813
973	Interest revenue		1,450	130
93,915	Total revenue		102,471	100,943
16,162	Personnel costs	3	18,636	16,035
1,952	Depreciation, amortisation and impairment	6, 7	2,119	2,342
62,242	Service provider contracts		69,366	56,781
12,586	Other expenses	4	10,900	25,655
92,942	Total expenditure		101,021	100,813
973	Total comprehensive revenue and expense		1,450	130

Statement of changes in equity

for the year ended 30 June 2024

Actual 2022/23 \$000		Actual 2023/24 \$000	Budget 2023/24 \$000
12,968	Balance at 1 July	13,941	14,080
973	Total comprehensive revenue and expense	1,450	130
13,941	Balance at 30 June	15,391	14,210

The accompanying notes form part of these financial statements. Explanations for major variances to budget are provided in **Note 18**.

Statement of financial position

as at 30 June 2024

Actual 2022/23 \$000		Note	Actual 2023/24 \$000	Budget 2023/24 \$000
Assets				
Current assets				
20,987	Cash and cash equivalents	5	9,056	16,198
160	Receivables and prepayments		585	200
–	Investments	5	12,000	–
21,147	Total current assets		21,641	16,398
Non-current assets				
1,245	Property, plant and equipment	6	1,103	1,930
8,192	Intangible assets	7	6,991	3,189
9,437	Total non-current assets		8,094	5,119
30,584	Total assets		29,735	21,517
Liabilities				
Current liabilities				
10,581	Creditors and other payables	8	12,495	6,000
1,550	Employee entitlements	9	1,540	1,000
38	GST payable (refundable)		(341)	200
4,212	Appropriation repayable to the Crown	10	353	–
16,381	Total current liabilities		14,047	7,200
Non-current liabilities				
71	Employee entitlements	9	79	18
191	Provisions	11	218	89
262	Total Non-current liabilities		297	107
16,643	Total liabilities		14,344	7,307
13,941	Net assets		15,391	14,210
Equity				
9,011	Contributed capital		9,011	9,011
4,930	Accumulated surplus		6,380	5,199
13,941	Total equity		15,391	14,210

The accompanying notes form part of these financial statements. Explanations for major variances to budget are provided in **Note 18**.

Statement of cash flows

for the year ended 30 June 2024

Actual 2022/23 \$000	Note	Actual 2023/24 \$000	Budget 2023/24 \$000
Cash flows from operating activities			
97,154	Receipts from the Crown	101,374	100,813
973	Interest from investments	1,450	130
(5,670)	Repayment of appropriation to the Crown	(4,212)	–
(70,884)	Payments to suppliers	(78,743)	(77,295)
(15,785)	Payments to personnel	(18,639)	(20,168)
(98)	Goods and services tax (net)	(379)	–
5,690	Net cash flows from operating activities	851	3,480
Cash flows from investing activities			
–	Receipts from the sale of fixed assets	–	–
–	Purchase of Investments	(12,000)	–
(286)	Purchase of property, plant and equipment	(65)	(771)
(3,078)	Purchase of intangibles	(717)	(2,546)
(3,364)	Net cash flows from investing activities	(12,782)	(3,317)
2,326	Net increase/(decrease) in cash and equivalents	(11,931)	163
18,661	Cash and cash equivalents at beginning of year	20,987	16,035
20,987	Cash and cash equivalents at end of period	9,056	16,198

The accompanying notes form part of these financial statements. Explanations for major variances to budget are provided in **Note 18**.

Notes to the financial statements

1. Accounting policies

Reporting entity

The Electricity Authority (Authority) is an independent Crown entity as defined by the Crown Entities Act 2004 and is domiciled and operates in New Zealand. The relevant legislation governing the Authority's operations includes the Crown Entities Act 2004 and Electricity Industry Act 2010 (Act). The Authority's ultimate parent is the New Zealand Crown.

The Authority's primary role is to provide services to the New Zealand public, and it does not operate to make a financial return. Accordingly, it has designated itself a public benefit entity (PBE) for financial reporting purposes.

The financial statements for the Authority are for the period 1 July 2023 to 30 June 2024 and were approved by the Board on 20 September 2024.

Basis of preparation

The financial statements have been prepared on a going concern basis and the accounting policies have been applied consistently throughout the period.

Statement of compliance

The financial statements of the Authority have been prepared in accordance with the requirements of the Crown Entities Act 2004, which includes the requirement to comply with New Zealand generally accepted accounting practice (NZ GAAP).

The Authority is a Tier 1 entity and the financial statements have been prepared in accordance with PBE accounting standards.

Presentation currency and rounding

The financial statements are presented in New Zealand dollars rounded to the nearest thousand dollars (\$000), except where otherwise stated.

New or amended standards adopted

2022 Omnibus Amendment to PBE Standards.

This standard has been issued to amend the relevant Tier 1 and Tier 2 PBE Standards:

- PBE IPSAS 16 – Investment Property
- PBE IPSAS 17 – Property, Plant and Equipment
- PBE IPSAS 19 – Provisions, Contingent Liabilities and Contingent Assets
- PBE IPSAS 30 – Financial Instruments: Disclosures

There has been little, if any change following issue of this standard.

Other changes in accounting policies

There were no significant changes to the accounting policies during the reporting period.

Standards issued and not yet effective and not early adopted

Standards and amendments that have been issued but are not yet effective, have not been early adopted, and are relevant to the Authority are:

Disclosure of Fees for Audit Firms' Services – Amendments to PBE IPSAS 1

Amendments to PBE IPSAS 1 Presentation of Financial Reports change the required disclosures for fees relating to services provided by the audit or review provider, including a requirement to disaggregate the fees into specified categories. The amendments to PBE IPSAS 1 aim to address concerns about the quality and consistency of disclosures an entity provides about fees paid to its audit or review firm for different types of services. The enhanced disclosures are expected to improve the transparency and consistency of disclosures about fees paid to an entity's audit or review firm. This is effective for the year ended 30 June 2025.

Summary of significant accounting policies

Revenue

The specific accounting policies for significant revenue items are explained below.

Funding from the Crown

The Authority is primarily funded by the Crown. This funding is restricted in its use for the purpose of the Authority meeting the objectives specified in its founding legislation and the scope of the relevant appropriations of the funder.

The Authority considers there are no conditions attached to the funding and it is recognised as non-exchange revenue at the point of entitlement. Appropriations received from the Crown are recognised as revenue to the extent that expenditure has been incurred. Appropriations received but not spent are treated as a Crown creditor and shown in the statement of financial position as a provision for refund of appropriations to the Crown.

Levies

The Authority administers a levy on industry participants under the Electricity Industry (Levy of Industry Participants) Regulations 2010 (Regulations). Levies are paid directly to the Crown for reimbursement of funding provided to the Authority. Levies are not recognised as revenue in the Authority's financial statements.

Interest

Interest is earned on bank deposits and recognised in the period to which it relates.

Operating leases

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset to the lessee. Lease incentives are recognised in the surplus/deficit as a reduction of rental expense over the lease term.

Lease payments under an operating lease are recognised as an expense on a straight-line basis over the lease term. Lease incentives are recognised in the surplus/deficit as a reduction of rental expense over the lease term.

Term deposits

Term deposits of terms up to three months are recorded as cash and cash equivalents. Term deposits with a maturity date of greater than three months are recorded as investments.

Receivables and prepayments

Short-term receivables are recorded at the amount due, less an allowance for expected credit losses.

The Authority applies the simplified expected credit loss model of recognising lifetime expected credit losses for receivables. In measuring expected credit losses, short-term receivables have been assessed on a collective basis as they possess shared credit risk characteristics. They have been grouped based on the days past due. Short-term receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include the debtor being in liquidation.

The Authority has not recognised any expected credit losses as there have been no significant history of debtors past due.

Property, plant and equipment

Property, plant and equipment consist of the following asset classes: computer hardware, furniture and fittings, office equipment and leasehold improvements.

Property, plant and equipment are shown at cost, less any accumulated depreciation and impairment losses.

Additions

The cost of an item of property, plant and equipment is recognised as an asset only when it is probable that future economic benefits or service potential associated with the item will flow to the Authority and the cost of the item can be measured reliably.

Disposals

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the asset. Gains and losses on disposals are reported net in the surplus or deficit.

Depreciation

Depreciation is provided on a straight-line basis on all property, plant and equipment at rates that will write-off the cost (or valuation) of the assets to their estimated residual values over their useful lives. The useful lives and associated depreciation rates of each asset class have been estimated as follows:

Computer hardware	3–5 years	20–33%
Furniture and fittings	5 years	20%
Office equipment	5 years	20%
Leasehold improvements	Shorter of the unexpired lease term and useful life	

Intangible assets

Software acquisition and development

Computer software licences are capitalised on the basis of the costs incurred to acquire the specific software and bring it to use.

Costs that are directly associated with the development of software are recognised as an intangible asset where this results in an asset controlled by the Authority. Work in progress is recognised at cost less impairment.

Staff training costs are recognised as an expense when incurred.

Costs associated with maintaining software are recognised as an expense when incurred.

Costs associated with the development and maintenance of the Authority's corporate website are recognised as an expense when incurred.

Where software is provided under a software-as-a-service arrangement, configuration and customisation costs are recognised as an intangible asset only if they create an intangible asset that the Authority controls and asset recognition criteria are met. Costs, including ongoing fees for use of software, that do not result in an intangible asset, or a software finance lease are expensed as a service contract as incurred. However, where fees represent payment for future services to be received, the Authority recognises these as a prepayment and expenses these as subsequent services are received.

Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each financial year is recognised in the surplus or deficit. The value of additions made to an existing asset are amortised over the remaining useful life of the existing asset.

The useful lives and associated amortisation rates of each asset class are estimated as follows:

Acquired computer software	3–17 years	6–33%
Internally developed computer software	3–17 years	6–33%

Impairment of capital assets

The Authority does not hold any cash generating assets. Assets are considered cash generating where their primary objective is to generate a commercial return.

Property, plant and equipment, and intangible assets that have a finite useful life are assessed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss would be recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of the asset's fair value less costs to sell and value in use.

Value in use is determined using an approach based on either depreciated replacement cost, restoration cost, or service units. The most appropriate approach depends on the nature of the impairment and availability of information.

If an asset's carrying amount exceeds its recoverable service amount, the asset is regarded as impaired and the carrying amount is written down to the recoverable amount. The total impairment loss is recognised in the surplus or deficit.

The reversal of an impairment loss is recognised in the surplus or deficit.

Payables and accruals

Short-term payables and accruals are recorded as exchange transactions at face value.

Employee entitlements

Short-term employee entitlements

Employee benefits that are due to be settled within 12 months after the end of the period in which the employee renders the related service are measured based on accrued entitlements at current rates of pay.

These include salaries and wages accrued up to balance date, annual leave earned but not yet taken at the balance date, and sick leave.

Sick leave is recognised to the extent that compensated absences in the coming year are expected to be greater than the sick leave entitlements earned in the coming year. The amount is calculated based on the unused sick leave entitlement that can be carried forward at balance date to the extent that the Authority anticipates it likely to be used by staff to cover those future absences.

Long-term employee entitlements

Employee benefits that are due to be settled beyond 12 months after the end of the period in which the employee renders the related service, such as long service leave, have been calculated on an actuarial basis. The calculations are based on:

- likely future entitlements accruing to staff, based on years of service, years to entitlement, the likelihood that staff will reach the point of entitlement, and contractual entitlement information; and
- the present value of the estimated future cash flows.

Presentation of employee entitlements

Sick leave, annual leave and vested long-service leave are classified as a current liability. Non-vested long service leave and retirement gratuities expected to be settled within 12 months of balance date are classified as a current liability. All other employee entitlements are classified as a non-current liability.

Superannuation schemes

Defined contribution schemes

Obligations for contributions to KiwiSaver and the State Sector Retirement Savings Scheme are accounted for as defined superannuation schemes and are recognised as an expense in the surplus or deficit as incurred.

Provisions

A provision is recognised for future expenditure of uncertain timing when there is a present obligation (either legal or constructive) as a result of a past event, it is probable that expenditure will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

Equity

Equity is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into the following components:

- contributed capital
- accumulated surplus/(deficit).

Goods and services tax

All items in the financial statements are presented exclusive of goods and services tax (GST), except for receivables and payables, which are presented on a GST inclusive basis. Where GST is not recoverable as input tax, it is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable to, the Inland Revenue Department at balance date is included as part of receivables, current assets, or payables, current liabilities, in the statement of financial position.

The net GST paid to, or received from, the Inland Revenue Department, including the GST relating to investing and financing activities, is classified as a net operating cash flow in the statement of cash flows.

Commitments and contingencies are disclosed exclusive of GST.

Income tax

The Authority is a public authority and consequently is exempt from the payment of income tax. Accordingly, no provision has been made for income tax.

Budget figures

The budget is derived from the *Statement of performance expectations 2023/24*, as approved by the Authority's Board.

The budget figures have been prepared in accordance with Tier 1 PBE accounting standards, using accounting policies that are consistent with those adopted by the Board in preparation of the financial statements. All budget figures are unaudited.

Measurement base

The financial statements have been prepared on a historical cost basis. The accounting policies that materially affect the measurement of financial performance, financial position and cash flows are set out below and have been applied consistently to all periods presented in these financial statements.

Critical accounting estimates and assumptions

In preparing these financial statements, the Authority has made estimates and assumptions concerning the future. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, or future financial years, are discussed below.

Impairment of intangible assets

At each balance date, the impairment of intangible assets is reviewed. Assessing the appropriateness of an asset impairment requires a number of factors to be considered, such as an asset's value in use and its carrying amount versus its recoverable amount.

Impairment will affect the amortisation or impairment expense recognised in the surplus or deficit and the carrying amount of the asset in the statement of financial position.

Estimating useful lives and residual values of intangible assets

At each balance date, the estimates of useful lives and residual values of intangible assets are reviewed. Assessing the appropriateness of these estimates requires several factors to be considered, such as the condition of the assets, expected period of use of the assets by the Authority and expected disposal proceeds from the future sale of the assets.

A revision to the estimate of the useful life or residual value of an asset will affect the amortisation expense recognised in the surplus or deficit and carrying amount of the asset in the statement of financial position.

2. Crown appropriations

The Authority has been provided with funding from the Crown for specific purposes as set out in the Electricity Industry Act 2010 and in the scope of the appropriations as set out in Vote Business, Science and Innovation. Appropriations are recognised as revenue to the extent that they are spent.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Electricity industry governance and market operations	100,843	92,073
Electricity litigation fund	178	869
	101,021	92,942

3. Personnel costs

	Actual 2023/24 \$000	Actual 2022/23 \$000
Salaries	16,767	13,665
Contractor costs	928	1,750
Contributions to defined superannuation plans	711	581
Movements in employee entitlements	230	166
	18,636	16,162

Contributions to defined contribution plans, include contributions to KiwiSaver and the State Sector Retirement Savings Scheme.

During the year ended 30 June 2024, \$34,731 was paid as severance relating to cessation of employment (2022/23: \$4,903).

4. Other expenses

4a. Other expenses

Breakdown of other expenses and information on operating lease commitments.

	Note	Actual 2023/24 \$000	Actual 2022/23 \$000
Advisory and working group fees	23	71	44
Auditor fees for external audit		65	67
Auditor fees for other services		36	56
Board member remuneration	21	623	689
External work programme support		5,221	5,897
Litigation fund		178	869
Operating lease expenses		669	606
Other operating expenses		3,814	4,097
Rulings Panel remuneration	22	41	66
Travel expenses		182	195
		10,900	12,586

4b. Operating Lease

The future aggregate minimum lease payments to be paid under non-cancellable operating leases.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Building lease		
Not later than one year	452	439
Later than one year but not later than five years	1,934	1,881
Later than five years	945	1,459
Total non-cancellable operating leases	3,331	3,779

The Authority entered into a new building lease agreement with effect from 21 April 2022 for a twelve-year term, expiring 20 April 2034. The lease allows for early termination after nine years, so the lease commitment is recognised for this period. For comparative purposes, the prior year 2022/23 disclosures have been updated to reflect the reduction in the lease commitment. The Authority does not have the option to purchase the asset at the end of the lease term.

5. Cash and cash equivalents, and investments

5a. Cash and cash equivalents

Cash and cash equivalents are short term, highly liquid investments that are readily convertible to cash and which are subject to an insignificant risk of changes in value. Cash and cash equivalents include:

	Actual 2023/24 \$000	Actual 2022/23 \$000
Cash at bank	3,756	2,287
On-call deposit accounts	4,300	3,200
Short-term deposits	1,000	15,500
Balance at 30 June	9,056	20,987

5b. Investments

Short-term investments comprise deposits greater than three months, no more than 12 months and therefore do not fall into the category of cash and cash equivalents.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Term deposits - maturing within 12 months of balance date	12,000	-
Balance at 30 June	12,000	-

6. Property, plant and equipment

There are no restrictions over the title of the Authority's plant, property and equipment, and no items of plant, property and equipment has been pledged as security for liabilities.

	Computer hardware \$000	Office equipment \$000	Furniture and fittings \$000	Leasehold improvement \$000	Total \$000
Cost or valuation					
Balance at 1 July 2022	150	58	424	669	1,301
Additions	–	47	54	234	335
Disposals	(49)	(4)	(22)	–	(75)
Balance at 30 June 2023	101	101	456	903	1,561
Balance at 1 July 2023	101	101	456	903	1,561
Additions	14	–	22	30	65
Disposals	–	–	(23)	–	(23)
Balance at 30 June 2024	114	101	454	933	1,603
Accumulated depreciation					
Balance at 1 July 2022	24	25	116	–	165
Depreciation expense	21	16	72	56	165
Eliminate on disposal	–	(2)	(12)	–	(13)
Impairment losses	–	–	–	–	–
Balance at 30 June 2023	45	39	176	56	317
Balance at 1 July 2023	45	39	176	56	317
Depreciation expense	27	17	76	81	200
Eliminate on disposal	–	–	(17)	–	(17)
Impairment losses	–	–	–	–	–
Balance at 30 June 2024	72	57	235	137	500
Net carrying value					
At 1 July 2022	126	33	308	669	1,136
At 30 June 2023 and 1 July 2023	56	62	280	847	1,245
At 30 June 2024	42	44	219	796	1,103

There are no contractual commitments for the acquisition of property, plant and equipment at 30 June 2024.

7. Intangible assets

There are no restrictions over the title of the Authority's intangible assets, and no intangible assets have been pledged as security for liabilities.

	Work in Progress \$000	Software and Systems \$000	Total \$000
Cost or valuation			
Balance at 1 July 2022	4,200	30,725	34,925
Additions	3,078	–	3,078
Transfers	(6,133)	6,133	–
Disposals	–	–	–
Balance at 30 June 2023	1,145	36,858	38,003
Balance at 1 July 2023	1,145	36,858	38,003
Additions	1,295	14	1,309
Transfers	(823)	823	–
Disposals	(174)	(417)	(591)
Balance at 30 June 2024	1,442	37,278	38,720
Accumulated amortisation			
Balance at 1 July 2022		28,024	28,024
Amortisation expense		1,787	1,787
Eliminate on disposal		–	–
Impairment losses		–	–
Balance at 30 June 2023		29,811	29,811
Balance at 1 July 2023		29,811	29,811
Amortisation expense		1,919	1,919
Eliminate on disposal		–	–
Impairment losses		–	–
Balance at 30 June 2024		31,730	31,730
Net carrying value			
At 1 July 2022	4,200	2,701	6,901
At 30 June 2023 and 1 July 2023	1,145	7,047	8,192
At 30 June 2024	1,442	5,548	6,991

The Authority's intangible assets comprise acquired and developed software, systems and associated licences, the most significant being the software used in the operation of the electricity market. As at 30 June 2024, intangible assets (including work in progress of \$1.442 million) had a cost of \$38.720 million, net carrying value of \$6.991 million, and an estimated remaining useful life of between three and five years.

8. Creditors and other payables

Payables and accruals are non-interest bearing and are normally settled on 30-day terms, therefore the carrying value of payables and accruals approximates their fair value.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Creditors	9,256	3,392
Accrued expenses	693	6,069
Other - market making obligation	2,546	1,120
	12,495	10,581

9. Employee entitlements

	Actual 2023/24 \$000	Actual 2022/23 \$000
Current entitlements		
Accrued salary	516	749
Annual leave	978	747
Long service and sick leave	47	54
Total current entitlements	1,540	1,550
Total current entitlements		
Long service leave	79	71
Total non-current entitlements	79	71
	1,619	1,621

10. Appropriation repayable to the Crown

The Authority receives funding by way of appropriations from the Crown. The Crown is reimbursed for this funding by levies collected from industry participants.

The Authority receives its appropriations monthly according to a funding profile agreed at the start of the financial year. At the end of the year, the difference between funding drawn down and total Authority expenditure is recorded as a payable or receivable with the Crown. If all appropriations are fully drawn down, the amount will be a payable representing unspent funding to be returned to the Crown.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Net Crown appropriations drawn down	101,374	97,154
Litigation expense funded by reserves	–	–
Less - total Authority expenditure	(101,021)	(92,942)
Appropriation repayable to the Crown	353	4,212

11. Provisions

	Actual 2023/24 \$000	Actual 2022/23 \$000
Current		
Lease - incentive	18	18
Total current	18	18
Non-current		
Lease - incentive	155	173
Lease - make-good	45	–
Total non-current	200	173
Balance at 30 June	218	191

The lease incentive provisions are the pro rata portions of the building lease incentive for office space at Level 7, Aon Centre, 1 Willis Street, Wellington, recognised over the life of the 12-year lease.

Lease make-good provision

At the expiry of the lease term for its leased premises, the Authority is required to make-good any damage caused to the premises and to remove any fixtures or fittings that it installed. The Authority has two options to renew the lease, which affects the timing of expected cash outflows to make-good the premises. In measuring the provision, the Authority has assumed it will not exercise the options to renew the lease. The cash flows associated with the non-current portion of the lease make-good provision are expected to occur in May and June 2034.

12. Reconciliation of net operating surplus to net cash flows

	Actual 2023/24 \$000	Actual 2022/23 \$000
Net operating surplus	1,450	973
Add non-cash items		
Depreciation, amortisation and impairment	2,119	1,952
Disposal of fixed assets	6	12
Movement in non-current employee entitlements	8	51
Total non-cash items	2,132	2,015
Add movements in working capital items		
Receivables and prepayments (increase)/ decrease	(425)	784
GST payables (increase)/decrease	(379)	(404)
Payables and accruals (increase)/decrease	1,916	3,670
Employee entitlements (increase)/decrease	(10)	326
Increase in provisions	27	(216)
Provision for refund of appropriation increase/ (decrease)	(3,859)	(1,458)
Net working capital movements	(2,730)	2,702
Net cash flow from operating activities	851	5,690

13. Related party transactions

The Authority is a wholly owned entity of the Crown and receives funding by way of appropriations from the Crown.

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/recipient relationship on terms and conditions no more or less favourable than those that it is reasonable to expect the Authority would have adopted in dealing with the party at arm's length in the same circumstances. Further, transactions with other government agencies (for example, government departments and Crown entities) are not disclosed as related party transactions when they are consistent with the normal operating arrangements between government agencies and undertaken on the normal terms and conditions for such transactions.

Government-related entities

The Authority purchased system operator and technical advisory services from Transpower New Zealand Limited, as well as the provision of the financial transmission right manager services and market support services from their division Energy Market Services, for a total of \$50.2 million (2022/23: \$47.6 million).

Key management personnel

Key management personnel, as defined by PBE IPSAS 20 Related Party Disclosures, are the members of the governing body which is comprised of the Board and senior leadership team, consisting of: Chief Executive, General Manager Corporate and Market Services, General Manager Strategic Communications and Engagement, General Manager Legal, Monitoring and Compliance, General Manager Market Policy, and Director Network Pricing. The aggregate remuneration of key management personnel and the number of individuals determined on a full-time equivalent basis, receiving remuneration, is as follows:

	2023/24 Actual	2022/23 Actual
Board Members		
Remuneration (\$000)	623	689
Full-time equivalent members	1.57	1.73
Senior Leadership Team		
Remuneration (\$000)	1,868	2,149
Full-time equivalent members	6.35	6.76
Total key management personnel remuneration (\$000)	2,491	2,838
Total full time equivalent personnel	7.92	8.49

The full-time equivalent for Board members has been determined based on actual hours spent attending Board meetings, events or meetings representing the Authority and time spent preparing for meetings.

14. Financial instruments

The Authority is party to financial instrument arrangements as part of its everyday operations. These financial instruments include bank accounts, term deposits, accounts receivable classified as financial assets at amortised cost and accounts payable classified as financial liability at amortised cost. The Authority does not have any other financial instruments.

Financial instrument risks

Interest rate risk

Interest rate risk is the risk that the return on funds invested and the cost of borrowed funds fluctuate due to changes in market interest rates.

The Authority's exposure to interest rate risk on funds invested is limited to on-call bank deposits and term deposits, which are subject to variable interest rates.

Under the Crown Entities Act 2004, the Authority requires Ministerial approval to enter into a borrowing arrangement. The Authority has no borrowings and accordingly, there is no interest rate exposure on borrowed funds.

Credit risk

Credit risk is the risk that a third party defaults on its obligations to the Authority, causing the Authority to incur a loss. The Authority only invests in financial institutions that have high credit ratings.

Liquidity risk

Liquidity risk is the risk that the Authority encounters difficulties raising liquid funds to meet commitments as they fall due. The Authority has a low exposure to liquidity risk as it does not enter into credit arrangements, except those available from suppliers as part of normal operating agreements and aims to maintain sufficient funds available on call to meet its liquidity requirements.

As at 30 June 2024, the expected cash outflows from payables maturing within six months is \$11,178,000 (2022/23: \$10,581,000). These amounts are the contractual undiscounted cash flows.

Currency risk

Currency risk is the risk that debtors and creditors due in foreign currency fluctuate because of changes in foreign exchange rates. The Authority has no significant exposure to currency risk on its financial instruments.

15. Equity

The Authority's equity comprises its contributed capital and accumulated surplus.

The Authority is subject to the financial management and accountability provisions of the Crown Entities Act 2004, which impose restrictions in relation to borrowings, acquisition of securities, issuing guarantees and indemnities and the use of derivatives.

The Authority prudently manages its revenues, expenses, assets, liabilities and general financial dealings to ensure it effectively achieves the objectives and purpose, while remaining a going concern.

16. Contingencies

As at 30 June 2024, there was one application for judicial review of Authority decisions, but this appeal has not been heard. There may be costs awarded for or against the Authority as a result of the outcome. The Authority is disclosing this appeal as a contingent event as there was no possibility of predicting the outcome at balance date.

As at 30 June 2023, the Authority disclosed three contingent events relating to applications for judicial review of Authority decisions. The outcomes of these reviews were as follows.

- On 3 July 2023, an application for judicial review of a decision by the Authority by Nova Energy Limited was dismissed and costs of \$28,033 were awarded to the Authority.
- On 6 October 2023, the Authority was required to pay interim costs of \$10,860 relating to one component of an appeal by Haast Energy Trading Limited and Electric Kiwi Limited. On 16 February 2024 the appeal was upheld, and the Authority was required to pay an additional cost settlement of \$60,000.

There are no longer any contingent liabilities associated with these cases.

On 28 March 2024 an application for judicial review of a decision by the Authority by Buller Electricity Limited was dismissed and costs of \$70,321.63 were awarded to the Authority. Buller Energy limited have appealed this decision. The outcome of this appeal is unknown as at 30 June 2024 and is disclosed above.

There are no other contingent assets or liabilities (2022/23: nil) other than disclosed above and no guarantees under the Crown Entities Act 2004 (2022/23: nil).

17. Post balance date events

The Board and management are not aware of any other matters or circumstances since the end of the reporting period, not otherwise dealt with in these financial statements, that have significantly or may significantly affect the operation of the Authority.

18. Explanation of major variances against budget

Expenditure against appropriations

Appropriations and output classes	Actual 2023/24 \$000	Budget 2023/24 \$000	Variance \$000
Operational appropriation			
Electricity industry governance and market operations	100,843	100,813	(30)
Other appropriations			
Electricity litigation fund	178	1,500	1,322
Managing the security of supply	–	1,200	1,200
Total	101,021	103,513	2,492

Electricity industry governance and market operations

This appropriation provides funding for the general operations of the Authority and the operation of the electricity system and market. Expenditure in 2023/24 was slightly higher than budget. The budget excludes an in-principle transfer received during the year of \$0.6 million.

Managing the security of New Zealand's electricity supply

This appropriation is contingent in nature and provides funding to allow the management of emergency events by the system operator, if required, including increased monitoring and management responsibilities in the event of an emerging security situation and planning and running an emergency conservation campaign. No expenditure was incurred under this appropriation in 2023/24.

Electricity litigation fund

This appropriation provides funding to ensure the regulatory body for the electricity industry is able to participate in litigation effectively and without delay. The appropriation is contingent in nature, and expenditure is only incurred if litigation arises. The cost of litigation funded by appropriation in 2023/24 was \$0.2 million.

The costs for 2023/24 have been spent primarily on the transmission pricing methodology litigation, and the undesirable trading situation that came out of the 9 August 2021 event. The Electricity Litigation Fund has an appropriation of \$1.5 million.

Statement of comprehensive revenue and expense

Crown appropriations

The revenue recognised from Crown appropriations was \$0.2 million higher than budgeted.

Depreciation, amortisation and impairment

Depreciation, amortisation and impairment expenses were \$0.2 million lower than budgeted, because of changes in the scope and timing of service provider managed projects.

Personnel

Personnel costs were \$2.6 million higher than budget. This is mainly due to the mix of contract and permanent personnel engaged during 2023/24, and higher than budgeted employee entitlement expenses.

Service provider contracts

Costs associated with the system operator and market service providers were \$12.6 million higher than budget. This is mainly due to the market making \$14.4 million budget incorrectly categorised as other expenses. This is partially offset by fewer trading days by the market making provider, than budgeted.

Other expenses

The other expenses budget was overstated by the inclusion of the \$14.4 million market making budget, being the key reason for the overall \$14.6 million variance.

Statement of financial position

Cash, cash equivalents and investments

Cash and cash equivalents were \$7.1 million lower than budget. This is mainly due to more recent bank term deposits invested in longer terms to maximise returns, therefore classifying them as investments.

The investments balance at the reporting date is \$12.0 million. The budget did not include investments.

Combined funds held at the reporting date exceeded the budget by \$4.9 million. This is due to a mix of reasons, including receipt of the new market making provider security deposit \$1.3 million, and interest income exceeding budget by \$1.3 million.

Intangible assets

The intangible assets budget set was understated and did not reflect the capital asset programme. This resulted in the actual recorded position being \$3.8 million higher at the end of the period.

Payables and accruals

Payables and accruals were \$6.5 million higher than budgeted, primarily due to higher system operator, market making and other internally driven initiatives as projects complete or scale up with costs being recognised in the last month of the year.

Refund of appropriation to the Crown

The Authority incurred expenditure that was \$0.4 million less than the amount of appropriation funding received from the Crown during the year. The unspent funds will be returned to the Crown.

Statement of cash flows

Receipts from the Crown

The variance to budget in Crown funding of \$0.6 million is due to an in-principle expense transfer received during the year, not included in the Authority's original 2023/24 budget.

Payments to suppliers

Payments to suppliers were \$1.5 million higher than budget. This was due to a mix of items, including higher service provider costs and reprioritisation of in-year savings (generated by timing of recruitment of new roles) on new initiatives.

Payments to personnel

Payments to personnel were \$1.5 million lower than budget. This is mainly due to the timing of recruitment of new roles following an uplift in baseline appropriation funding.

19. Operating commitments

The operating commitments represent the minimum payments due under contractual notice periods for termination, or the contract expiry date.

Service provider agreements exist for the clearing manager, pricing manager, reconciliation manager, registry manager, wholesale and information trading system manager, financial transmission rights manager and system operator. The key reason for the increased future commitment is the renewal of five contracts for three-year terms commencing 1 July 2024.

The system operator agreement has no fixed expiry date and has a three-year notice period for termination.

Operating commitments	Actual 2023/24 \$000	Actual 2022/23 \$000
Service providers		
Not later than one year ²⁵	57,357	55,979
Later than one year but not later than five years ²⁶	120,607	101,772
	177,964	157,751
Other operating commitments		
Not later than one year	10,096	12,653
Later than one year but not later than five years	8,215	1,605
	18,311	14,258
Total operating commitments	196,275	172,009

25 A \$10.5 million operating commitment was reclassified from service provider not later than one year, to other operating commitments not later than one year.

26 The 2022/23 commitment has been restated from \$50,134,000 to \$101,772,000 due to the interpretation of the system operator agreement.

20. Employee remuneration

Disclosure of employee remuneration paid

Employee remuneration paid over \$100,000 during the year ended 30 June 2024, grouped into \$10,000 bands.

	2023/24 Actual	2022/23 Actual
\$100,000–\$109,999	10	6
\$110,000–\$119,999	6	3
\$120,000–\$129,999	7	7
\$130,000–\$139,999	10	4
\$140,000–\$149,999	10	4
\$150,000–\$159,999	3	5
\$160,000–\$169,999	5	4
\$170,000–\$179,999	3	5
\$180,000–\$189,999	11	3
\$190,000–\$199,999	2	2
\$200,000–\$209,999	5	3
\$210,000–\$219,999	3	3
\$220,000–\$229,999	2	2
\$230,000–\$239,999	2	3
\$240,000–\$249,999	–	–
\$250,000–\$259,999	1	2
\$260,000–\$269,999	1	–
\$270,000–\$279,999	1	–
\$280,000–\$289,999	–	–
\$290,000–\$299,999	1	–
\$360,000–\$369,999	–	1
\$390,000–\$399,999	1	–
	84	57

21. Board member remuneration

	Actual 2023/24 \$000	Actual 2022/23 \$000
Allan Dawson	99	115
Lana Stockman	106	102
Paula Rose QSO	77	44
Erik Westergaard	76	39
Dr Cristiano Marantes (appointed 1 July 2023)	36	–
Anna Kominik (Chair - appointed 13 July 2023)	224	–
Sandra Gamble (resigned 23 December 2022)	–	76
Mark Sandelin (resigned 31 March 2023)	–	69
Dr Nicola Crauford (Chair – term completed 13 July 2023)	5	244
	623	689

The Remuneration Authority, an independent body set up by Parliament, determines the remuneration received by Board members.

Board member fees vary based on the number of hours worked throughout the year. Hours worked may vary depending on membership of various committees, and the role held on these committees.

No Board members received compensation or other benefits in relation to cessation (2022/23: nil). The Authority has directors' and officers' liability and professional indemnity insurance cover in respect of the liability or costs of Board members and employees.

22. Rulings Panel remuneration

	Actual 2023/24 \$000	Actual 2022/23 \$000
Denis O'Rourke (resigned 1 March 2023)	–	(3)
Geraldine Baumann (resigned 28 June 2023)	–	10
Lee Wilson	2	14
Matthew Dunning (appointed 6 July 2023)	6	–
Mel Orange (Chair)	30	45
Paul Webber (appointed 6 July 2023)	3	–
	41	66

A negative amount indicates the final fees being lower than estimated.

23. Advisory group and working group fees

		Actual 2023/24 \$000	Actual 2022/23 \$000
Common Quality Technical Group	Barbara Elliston	5	–
	Brad Henderson	3	–
	Robert Orange	6	–
Innovation and Participation Advisory Group	John Hancock (Chair)	–	1
Market Development Advisory Group	Tony Baldwin (Chair)	14	12
			–
Network Connections Technical Group	Trent Tscheuschler	4	–
Security and Reliability Council	Allan Miller	5	2
	Barbara Elliston	5	5
	Heather Roy (Chair)	19	19
	Nanette Moreau Hammond	8	5
	Rebecca Larking	2	–
		71	44

Advisory groups and working groups comprise members paid by the Authority and members working in the industry who are paid by their own organisation. The members' fees listed below are those paid by the Authority and do not represent the complete membership of each group.

The Innovation and Participation Advisory Group was disestablished in February 2024 and the Market Development Advisory Group's term ended in February 2024.

Three new technical groups were established to provide technical advice to our Board:

- Common Quality Technical Group – established February 2024
- Network Connections Technical Group – established February 2024
- Distribution Connection Pricing Technical Group – established June 2024

Due to the timing of establishment, no fees were recorded in the year ended 30 June 2024, relating to the Distribution Connection Pricing Technical Group.

Statement of electricity levy of industry participants

Levies collected from industry participants during the financial year are deposited into a Crown bank account administered by the Ministry of Business, Innovation and Employment. A reconciliation is carried out after the end of the financial year between levies collected and expenditure to be recovered by the levy. The Crown will either provide a refund to, or request additional payment from, individual industry levy payers based on this reconciliation. Any over or under recovery of the Energy Efficiency and Conservation Authority portion of the levy is applied as an adjustment to the levy rate in future years, rather than being refunded or collected through the reconciliation process.

For the year 1 July 2023 to 30 June 2024, the levies collected were 2.2 percent higher than the expenditure to be recovered. The difference is expected to be \$2.323 million which will be refunded to levy payers. The final amount owed may vary from this amount and some levy payers may still be required to pay additional levies while others receive a refund. This refund depends on whether they are generators, retailers or distributors and is based on variations from estimated volumes of dispatches, sales and customer connections.

	Actual 2023/24 \$000	Actual 2022/23 \$000
Total levies collected by the Crown	108,443	101,725
Electricity Authority expenditure	101,021	92,942
Energy Efficiency and Conservation Authority (EECA operations)	5,100	5,300
Total expenditure to be recovered by levies	106,121	98,242
Total owed to levy payers by the Crown	2,322	3,483

Statement of responsibility

The Board is responsible for the preparation of the Electricity Authority's financial statements and annual report, and for the judgements made in them.

It is responsible for any end-of-year performance information provided by the Electricity Authority under section 19A of the Public Finance Act 1989.

It has the responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of financial and performance reporting.

In the Board's opinion, these financial statements and annual report fairly reflect the financial position and operations of the Electricity Authority for the year ended 30 June 2024.

Signed on behalf of the Board:



Anna Kominik
Chair

20 September 2024



Paula Rose QSO
Audit and Finance Committee Chair

20 September 2024



Independent auditor's report

AUDIT NEW ZEALAND
Mana Arotake Aotearoa

To the readers of the Electricity Authority's financial statements and performance information for the year ended 30 June 2024

The Auditor-General is the auditor of the Electricity Authority (the Authority). The Auditor-General has appointed me, Fiona Elkington, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements and the performance information, including the performance information for appropriations, of the Authority on his behalf.

Opinion

We have audited:

- the financial statements of the Authority on pages 72 to 94, that comprise the statement of financial position as at 30 June 2024, the statement of comprehensive revenue and expenses, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements including a summary of significant accounting policies and other explanatory information; and
- the performance information which reports against the Authority's statement of performance expectations and appropriations for the year ended 30 June 2024 on pages 42 to 57.

In our opinion:

- the financial statements of the Authority:
 - > present fairly, in all material respects:
 - its financial position as at 30 June 2024; and
 - its financial performance and cash flows for the year then ended; and
 - > comply with generally accepted accounting practice in New Zealand in accordance with the Public Benefit Entity Reporting Standards; and

- the Authority's performance information for the year ended 30 June 2024:
 - > presents fairly, in all material respects, for each class of reportable outputs:
 - its standards of delivery performance achieved as compared with forecasts included in the statement of performance expectations for the financial year; and
 - its actual revenue and output expenses as compared with the forecasts included in the statement of performance expectations for the financial year.
 - > presents fairly, in all material respects, for the appropriations:
 - what has been achieved with the appropriations; and
 - the actual expenses or capital expenditure incurred as compared with the expenses or capital expenditure appropriated or forecast to be incurred; and
 - > complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 26 September 2024. This is the date at which our opinion is expressed.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Board and our responsibilities relating to the financial statements and the performance information, we comment on other information, and we explain our independence.

Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of the Board for the financial statements and the performance information

The Board is responsible on behalf of the Authority for preparing financial statements and performance information that are fairly presented and comply with generally accepted accounting practice in New Zealand. The Board is responsible for such internal control as they determine is necessary to enable them to prepare financial statements and performance information that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements and the performance information, the Board is responsible on behalf of the Authority for assessing the Authority's ability to continue as a going concern. The Board is also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to merge or to terminate the activities of the Authority, or there is no realistic alternative but to do so.

The Board's responsibilities arise from the Crown Entities Act 2004 and the Public Finance Act 1989.

Responsibilities of the auditor for the audit of the financial statements and the performance information

Our objectives are to obtain reasonable assurance about whether the financial statements and the performance information, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers, taken on the basis of these financial statements and the performance information.

For the budget information reported in the financial statements and the performance information, our procedures were limited to checking that the information agreed to the Authority's statement of performance expectations.

We did not evaluate the security and controls over the electronic publication of the financial statements and the performance information.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements and the performance information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- We obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Board.
- We evaluate the appropriateness of the performance information which reports against the Authority's statement of performance expectations and appropriations.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Board and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Authority's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements and the performance information or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Authority to cease to continue as a going concern.
- We evaluate the overall presentation, structure and content of the financial statements and the performance information, including the disclosures, and whether the financial statements and the performance information represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other information

The Board is responsible for the other information. The other information comprises the information included on pages 2 to 41, 58 to 71 and 95 to 129, but does not include the financial statements and the performance information, and our auditor's report thereon.

Our opinion on the financial statements and the performance information does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements and the performance information, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements and the performance information or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of the Authority in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1: International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand) (PES 1) issued by the New Zealand Auditing and Assurance Standards Board.

In addition to the audit, we are completing probity assurance engagements for the Authority, which are compatible with those independence requirements. Other than the audit and these engagements we have no relationship with, or interests, in the Authority.



Fiona Elkington

Audit New Zealand

On behalf of the Auditor-General

Wellington, New Zealand



Appendix A

Outcome measures

This appendix provides detailed information to support the Authority's high-level progress against the outcome measures used to assess the competition, reliability and efficiency parts of our main statutory objective.

Some statistics in this section relate to calendar years, as it is a limitation of the software used to generate the data. When a year is referred to that is not in the 20XX/XX format (eg, 2023/24), it can be assumed that it refers to the calendar year.

Competition

Measure 1: Improved participant perceptions of the competitiveness in electricity markets

Statutory objective	Outcome measure	Source	Desired trend
Competition	Improved participant perceptions of the competitiveness in electricity markets	Participant survey	Increasing

Percentage of participants who agree with a range of statements on electricity market competitiveness:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
Competition between electricity generators ensures wholesale market prices are set at an efficient level	2023/24	43%	17%	31%	9%	137
	2022/23	41%	10%	41%	8%	118
Competition between electricity generators ensures they build the most efficient power stations	2023/24	35%	23%	32%	10%	137
	2022/23	32%	21%	38%	8%	118
Competition between retailers ensures that consumer prices only rise in line with costs to the electricity companies	2023/24	43%	21%	30%	6%	137
	2022/23	45%	21%	27%	7%	118

Percentage of participants who agree that prices in the following electricity markets reflect the outcomes expected in a workably competitive market:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
Retail market	2023/24	40%	16%	31%	11%	137
	2022/23	36%	20%	33%	11%	118
Spot market	2023/24	32%	20%	37%	11%	137
	2022/23	29%	17%	37%	17%	118
Hedge market, including ASX ²⁷ and OTC ²⁸	2023/24	33%	24%	26%	18%	137
	2022/23	32%	19%	23%	26%	118
Ancillary service markets	2023/24	13%	34%	25%	28%	137
	2022/23	13%	35%	24%	28%	118

²⁷ Australian securities exchange.

²⁸ Over-the-counter hedges.

Measure 2: Improved consumer perceptions of the competitiveness of electricity markets

Statutory objective	Outcome measure	Source	Desired trend
Competition	Improved consumer perceptions of the competitiveness of electricity markets	Consumer survey	Increasing

Percentage of consumers who agree with a range of statements on electricity market competitiveness:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
I have a choice in my electricity provider	2023/24	3%	10%	85%	2%	1,033
	2022/23	4%	10%	83%	3%	1,006
I can find a power company that meets my needs	2023/24	6%	20%	72%	2%	1,033
	2022/23	7%	17%	73%	3%	1,006
Having a choice of power companies means I can find a fair price	2023/24	11%	20%	66%	2%	1,033
	2022/23	8%	20%	69%	3%	1,006
I have enough information to know which electricity provider is best for me*	2023/24	14%	24%	60%	2%	1,033
	2022/23	–	–	–	–	–

* New measure added for 2024 survey.

Measure 3: Overall improvement across a suite of statistics on electricity market competitions

Statutory objective	Outcome measure	Source	Desired trend
Competition	Overall improvement across a suite of statistics on electricity market competition	Authority data	Improving

Statistics

1. Retail market concentration (HHI statistic)	Retail market concentration is showing a slight decline.
2. Retail market share (CR4 statistic)	Retail market concentration is approximately stable.
3. Net pivotal analysis	Net pivotal analysis wasn't completed in 2023/24 due to required updates in the vSPD ²⁹ system, completed at financial year-end.
4. Hedge market concentration (HHI statistic)	The HHI remains relatively stable. The average HHI for the 2023/24 period was 2,292.
5. Concentration in the ancillary services market (HHI of reserves statistic)	The HHI remains low and stable long-term.
6. Number of retailers' approaches to consumers with offers to induce switching	In 2024, 41 percent of survey respondents had been approached one or more times in the past 24 months. This is a decrease from 49 percent in 2023.

The Herfindahl-Hirschman Index (HHI) is referred to throughout this section. An HHI provides one measure of market concentration. A decreasing HHI indicates decreasing market concentration, which can indicate greater competition. The HHI is calculated as the sum of the squares of the market share of all participants. The index can range from zero to 10,000, the latter indicating a pure monopoly. An HHI below 1,500 is usually accepted as an indication of an unconcentrated (competitive) market. An HHI between 1,500 and 2,500 indicates a moderately concentrated market, while an HHI above 2,500 indicates a concentrated market.³⁰ However, the classification used for a large market such as the United States might not reflect the reality of a comparatively smaller market, like New Zealand.

²⁹ vSPD stands for vectorised Scheduling, Pricing and Dispatch. The vSPD model is a precise replica of the Scheduling, Pricing and Dispatch software used by the system operator. The software returns the optimal prices and quantities for the New Zealand Electricity Market to supply demand at any given trading interval.

³⁰ See, for example: U.S. Department of Justice and the Federal Trade Commission - Horizontal Merger Guidelines (2010) Available at: www.justice.gov/atr/file/810276/dl?inline

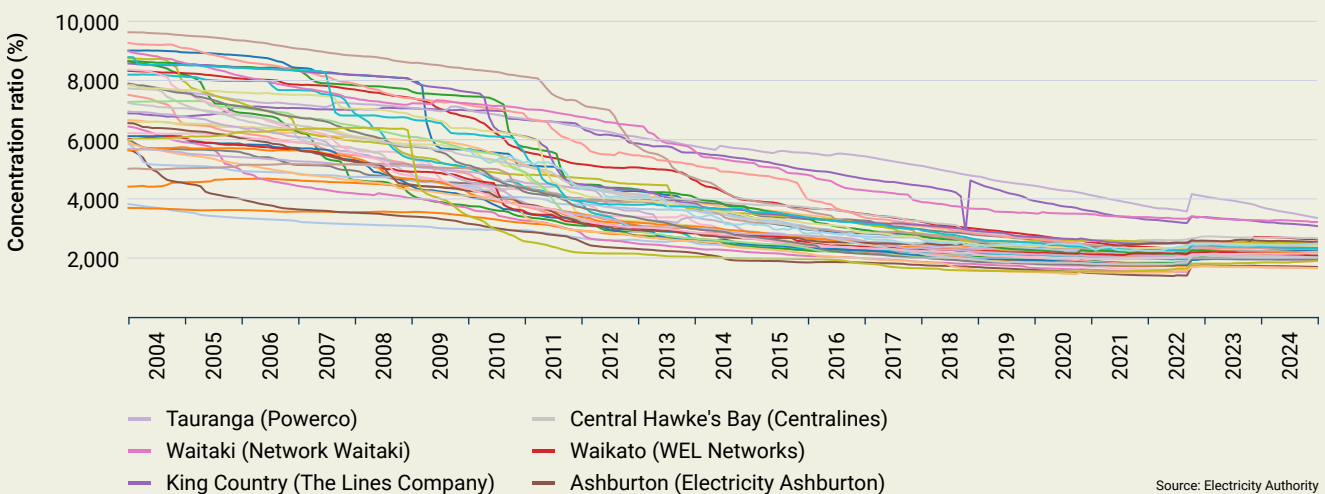
Retail market concentration (HHI statistics) / share (CR4 statistic)

We take a structure-conduct-performance approach to assessing competition. We use HHI (statistic 1) and concentration ratio statistics (statistic 2) as measures of concentration.

These measures help to assess the structure of the market. Figures 7-9 show these measures are falling in the residential retail market, although slower in the past two years compared to 2012-22. This suggests the structure of the market is slowly improving, but is still moderately concentrated, by the classification above.

The concentration in New Zealand retail market is highly regional (see Figure 7). In June 2024, the HHI varied between 1,627 and 3,367 across the 40 network reporting regions.³¹ From those 40 regions, however, only six showed HHI above 2,500 in the same period.

Figure 7: HHI trends by network reporting regions



Source: Electricity Authority

To improve competition, the Authority is focusing on several activities including:

- investigating over-the-counter risk management contracts and whether this is creating a barrier to entry or expansion in the retail electricity market
- improving our collection and monitoring of retail data to enable us to have better visibility of the retail market. This increased visibility will enable us to identify potential issues, publish more insights and make well-informed policy decisions that will benefit consumers.

The step change seen in 2022 relates to the acquisition of Trustpower Limited’s retail business by Mercury NZ Limited and accounts for the change in the downward trend around that time. The other step change occurred in mid-2018 in the King Country area when Trustpower Limited purchased King Country Energy’s retail customers.

³¹ Network reporting regions are used for reporting purposes and are not defined in the Electricity Industry Participation Code 2010. They are generally formed by historic Electricity Power Board networks (with some aggregations) and align with pricing regions commonly used in the retail market today. Specifically, network reporting regions are defined by a group of network supply points.

Figure 8: Retail market concentration/share (residential only)

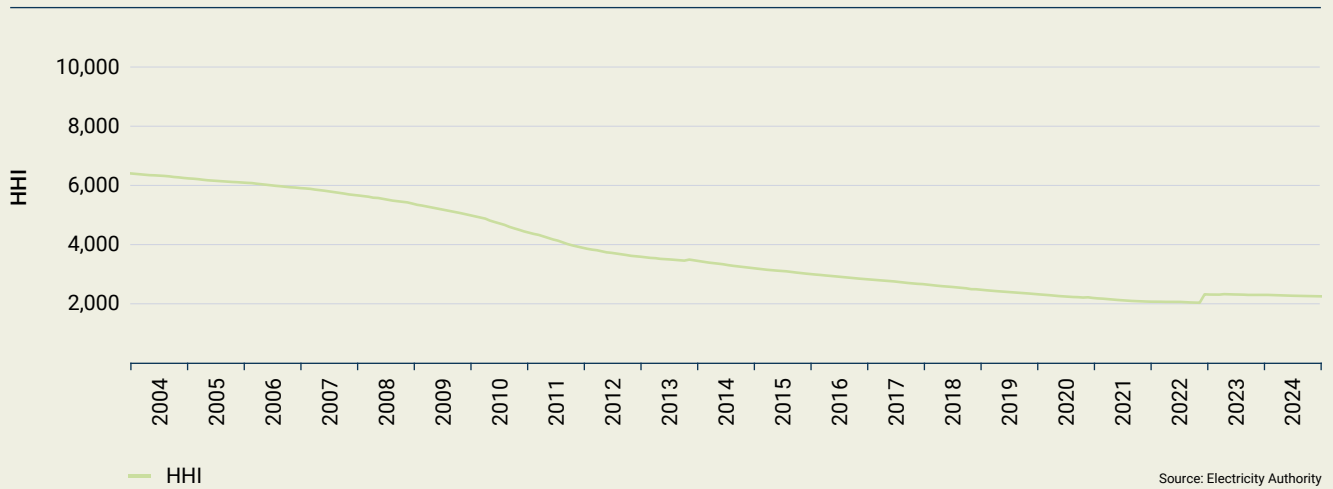
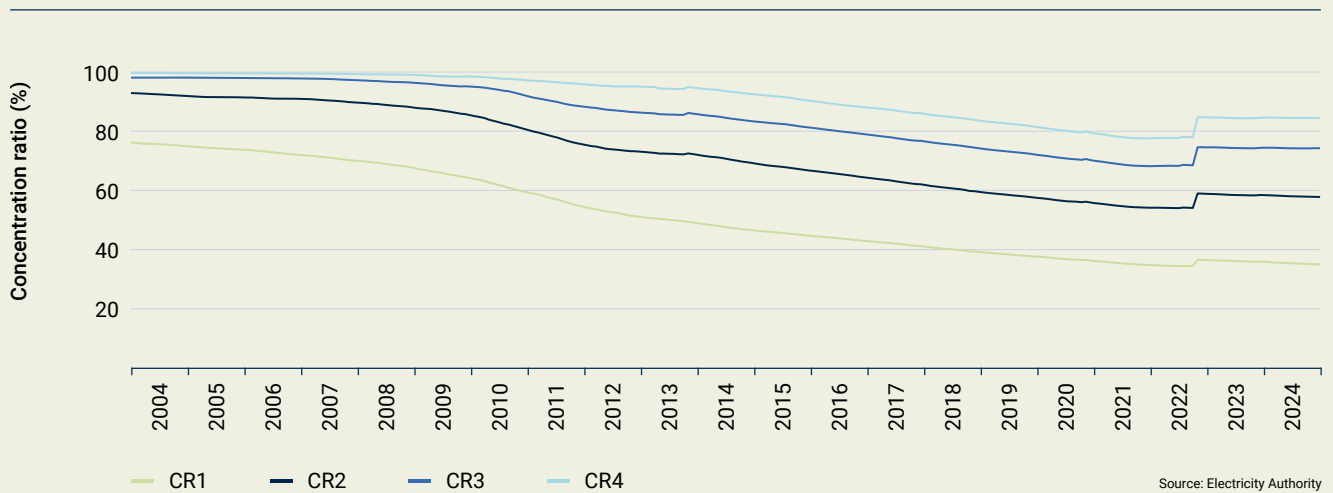


Figure 9: Retail market concentration/share (residential only) detailed by concentration ratio³²



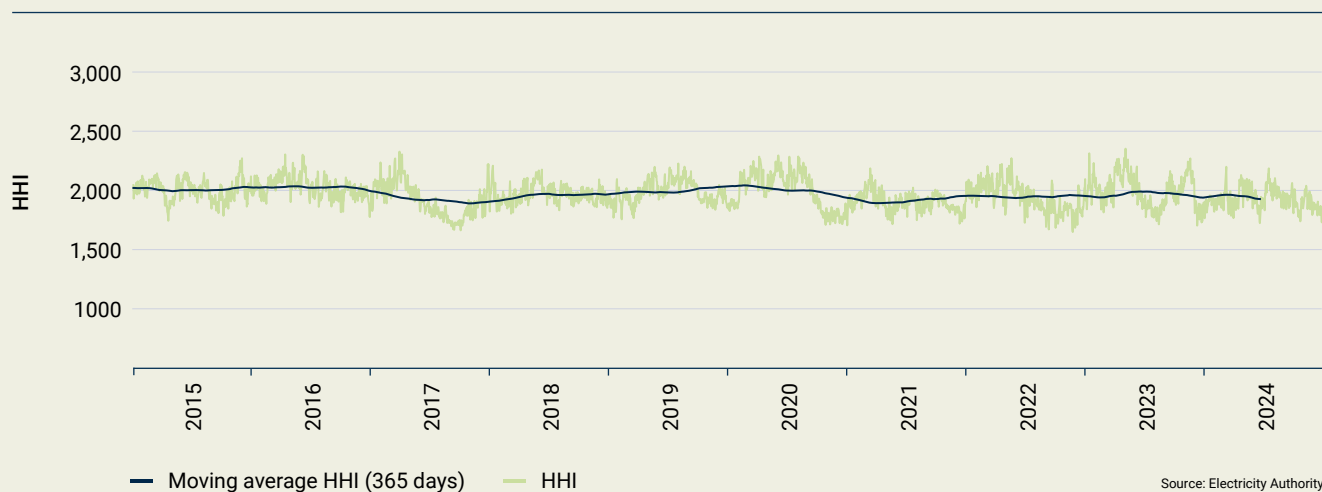
Generation market concentration

We also look at HHI in electricity generation. The HHI has trended downward slightly over the long term (see Figure 10), although there is some seasonality as HHI tends to fall during periods when water is scarce and climbs when water is abundant. Below-average inflows during 2023/24 meant the HHI decreased and has been trending down in 2024, as large hydro generators have been conserving water.

While relatively stable, and decreasing over the long term, the HHI results indicate a moderately concentrated market.

The Authority will continue to focus on reducing barriers to investment in generation. Although the Authority is neutral about the overall mix of generation technology, we are focused on removing barriers and facilitating innovation to enable new technologies and a more competitive market.

³² Concentration ratios measure the share of the market held within a specified number of the largest companies

Figure 10: Generation market concentration

Net pivotal analysis

The net pivotal analysis (statistic 3) was not completed in 2023/24 due to the updates to the vSPD system, which needed to be rebuilt to account for real-time pricing (introduced in November 2022). The update was completed only recently and the Authority is developing an updated process for calculating the net pivotal measure, which will be introduced in 2024/25.

Hedge market concentration

We monitor the hedge market's concentration through HHI statistics (statistic 4). Figures 11-14 show the HHI for hedge sellers and buyers for monthly and quarterly ASX contracts³³ we monitor. The HHI in this context is more a measure of conduct than structure.

Most contracts have HHIs between 2,000 and 3,500. The results indicate an increase in interest for monthly and quarterly buy contracts, while sell contracts showed a less pronounced increase, especially for monthly contracts.

Monthly contracts exhibit more volatile HHIs than quarterly contracts. This indicates that there are generally more traders within the quarterly market (seen by a more stable HHI), whereas traders move in and out of the monthly market.

Quarterly contracts have shown an upward trend in the HHI since 2018 for both buy and sell contracts, especially for Ōtāhuhu contracts. Long-dated futures contracts (as seen in the quarterly HHIs) are thinly traded and show higher HHI at times than the long-term average.

³³ The Australian Securities Exchange (ASX) electricity futures and options are standardised contracts structured as cash-settled contracts: www.ea.govt.nz/industry/wholesale/hedge-market/

Figure 11: Hedge market concentration for monthly buyers

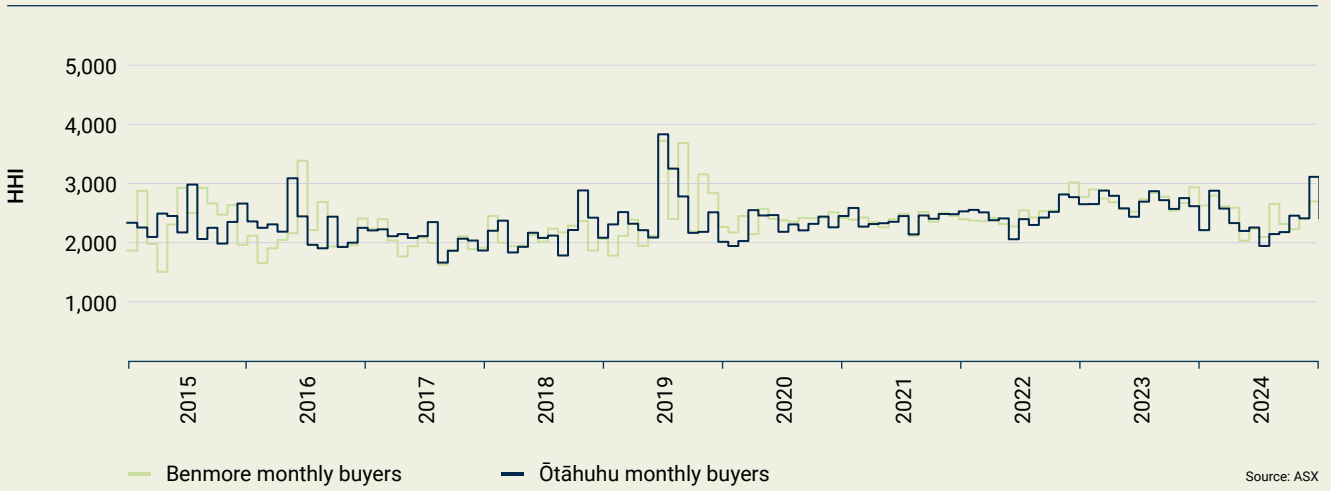


Figure 12: Hedge market concentration for quarterly buyers

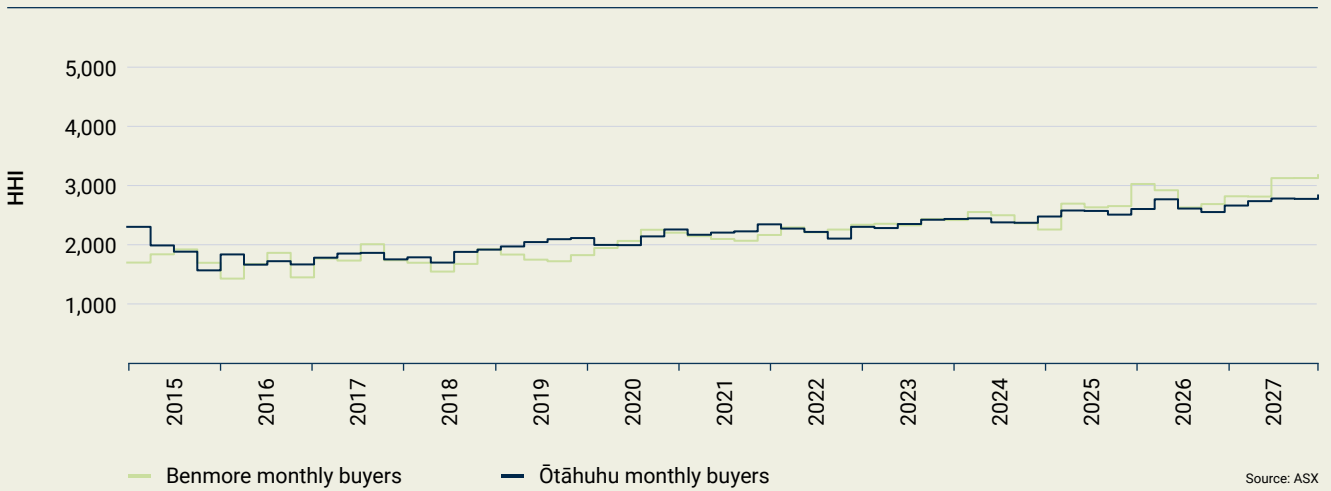


Figure 13: Hedge market concentration for monthly sellers

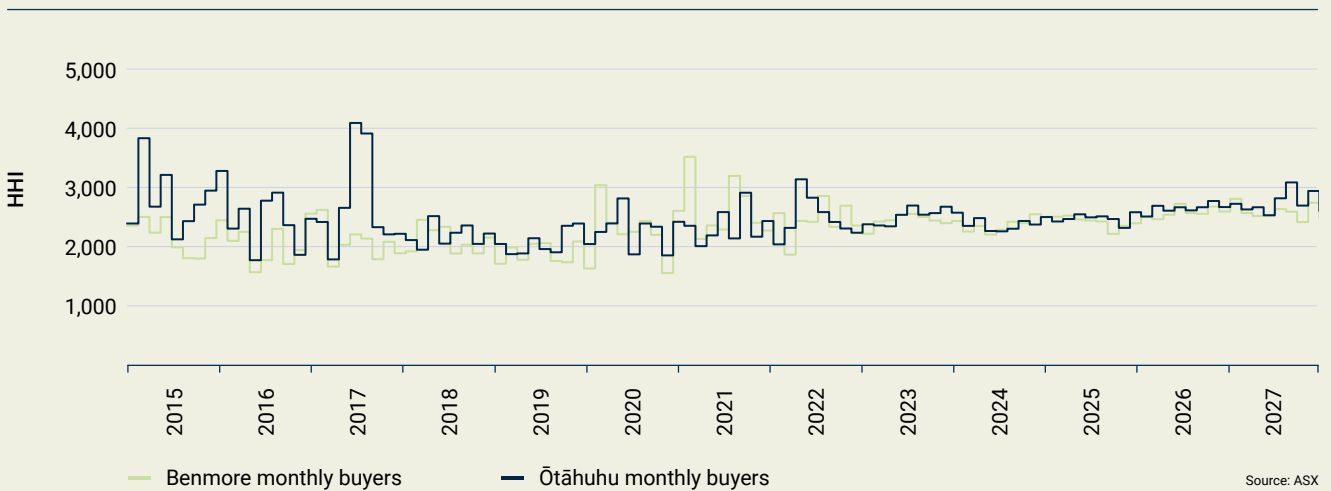
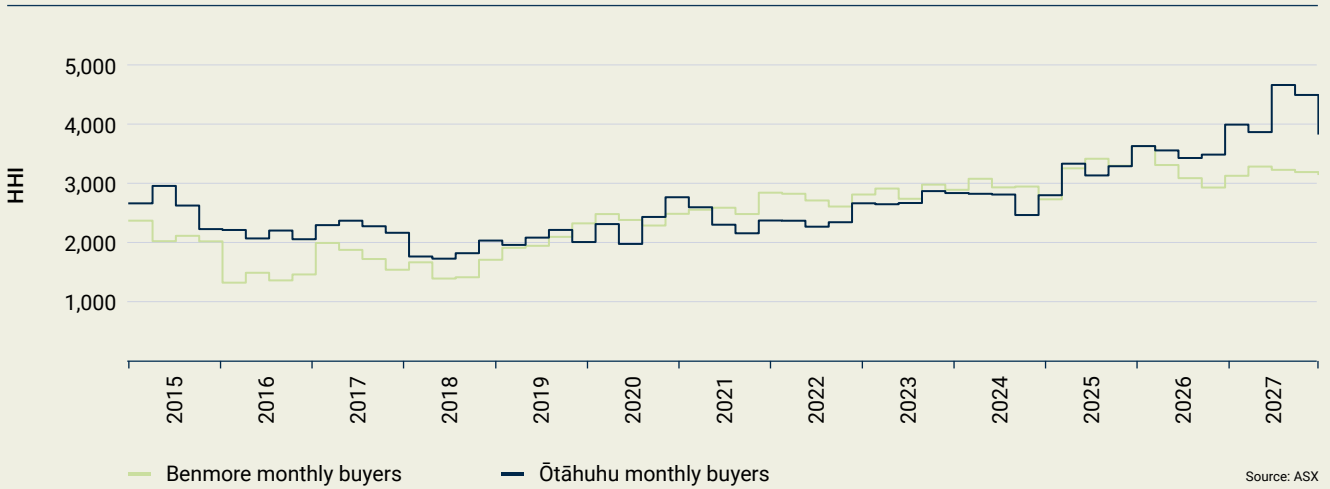


Figure 14: Hedge market concentration for quarterly sellers

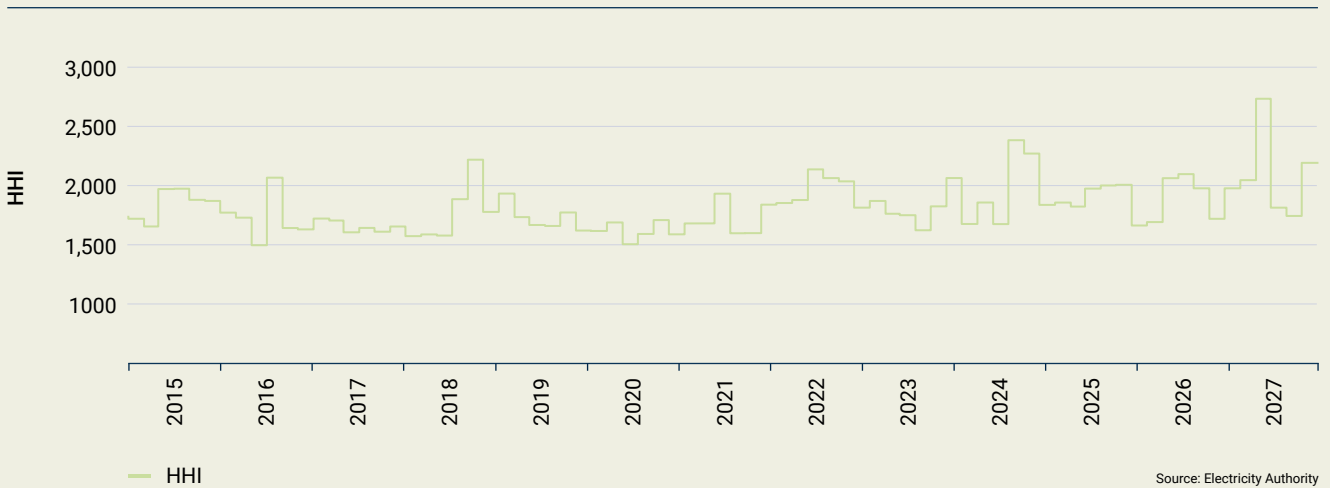


Concentration in the ancillary services market (HHI of reserves statistic)

The structure of the reserves market (see Figure 15) tracks the monthly HHI for the reserve markets in the North and South Islands (statistic 5).

Concentration in the reserves market has remained relatively stable in the long term, with the HHI sitting between 1,500 and 2,500 for most of the 2023/24 financial year. The first two quarters of 2024 showed an increase compared to the same period in 2022 and 2023. In March 2024, HHI peaked at over 2,700, reaching the highest levels in the series since 2018/19, indicating higher concentration.

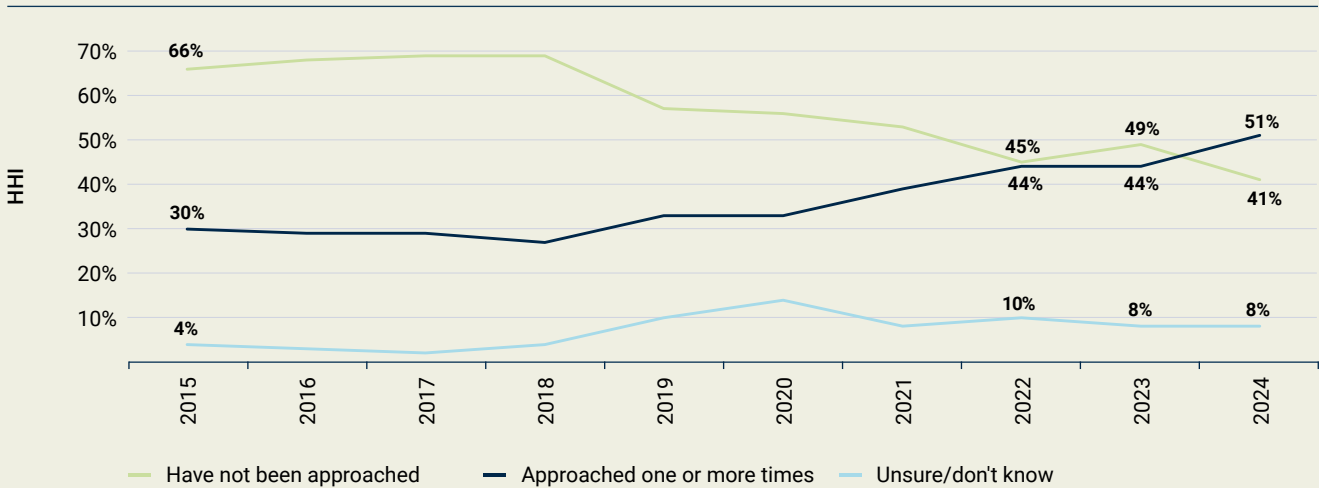
Figure 15: Reserves market concentration



Number of retailers' approaches to consumers with offers to induce switching

Figure 16 shows the number of retailers' approaches to consumers, which dropped to 41% in 2023/24, 8% lower than in 2022/23.

Figure 16: Number of retailers' approaches to residential consumers to switch retailers



Reliability

Measure 4: Improved participant perceptions on the efficiency of supply reliability

Statutory objective	Outcome measure	Source	Desired trend
Reliability	Improved participant perceptions on the efficiency of supply reliability	Participant survey	Increasing

Percentage of participants who agree with a range of statements on electricity supply reliability:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
There is a reliable supply of electricity each day	2023/24	15%	15%	68%	1%	137
	2022/23	10%	14%	75%	1%	118
There is enough electricity to meet ongoing needs	2023/24	31%	23%	43%	3%	137
	2022/23	37%	17%	44%	2%	118

Measure 5: Improved participant perceptions of the balance between the cost and reliability trade-offs

Statutory objective	Outcome measure	Source	Desired trend
Reliability	Improved participant perceptions of the balance between the cost and reliability trade-offs	Participant survey	Increasing

Percentage of participants who agree with a range of statements on the balance between the cost and reliability trade-offs:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The current electricity market arrangements ensure an appropriate balance between reliability and cost	2023/24	31%	30%	36%	3%	137
	2022/23	31%	31%	35%	3%	118
Over the next 10 years the electricity system will strike a balance between reliability and cost	2023/24	35%	27%	32%	6%	137
	2022/23	39%	28%	28%	5%	118

Measure 6: Improved consumer perceptions of the reliability of electricity in New Zealand

Statutory objective	Outcome measure	Source	Desired trend
Reliability	Improved consumer perceptions of the reliability of electricity in New Zealand	Consumer survey	Increasing

Percentage of consumers who agree with a range of statements on electricity reliability

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
It's rare to experience an unplanned power cut	2023/24	9%	15%	74%	1%	1,033
	2022/23	12%	15%	71%	2%	1,006
If there is an unplanned power cut, it gets fixed quickly	2023/24	7%	22%	65%	6%	1,033
	2022/23	11%	22%	63%	4%	1,006
There is enough electricity to keep New Zealand homes and business powered in the future	2023/24	27%	25%	39%	10%	1,033
	2022/23	17%	22%	49%	12%	1,006

Measure 7: Overall improvement across a suite of statistics on efficient levels of reliable electricity supply

Statutory objective	Outcome measure	Source	Desired trend
Reliability	Overall improvement across a suite of statistics on efficient levels of reliable electricity supply	Authority data	Improving

Statistics

7. Pricing in scarcity events	The management of low residual situations was properly conducted in 2023/24, contributing to the reliability of the electricity system.
8. Effective management of dry years or emergency event.	There were no dry-year events in 2023/24. Extreme solar activity and the fall of a power pylon (both in 2024) constituted the two emergency events in 2023/24.
9. Capacity and energy margins are within efficient bounds or are moving towards those bounds	The latest security of supply annual assessment (2024) indicates that New Zealand energy margins are within the efficient bounds set by the Board whilst capacity margins can be impacted by the large amount of intermittent generation expected to be commissioned in the next 10 years. ³⁴
10. Investigation of reliability events	There was one reliability event in 2023/24 caused by the fall of a power pylon near Glorit, north of Auckland. A review is underway and our report was delivered to the Minister for Energy in September 2024.

³⁴ See: Transpower Security of Supply Assessment (2024)

Pricing in scarcity events

The Authority monitors trading conduct and publishes reports.³⁵ The objective is to ensure prices reflect competitive outcomes, including during low residual situations.

Similar to the previous financial year, low residual situations did not impact the electricity supply in 2023/24.

From July 2023 to June 2024, there were only four events when actual residual generation levels dropped below 200MW.³⁶ The number of events represents a noticeable decrease compared to 2022/23 when there were 20 such events.

In 2023/24, the system operator published seven Customer Advice Notices (CANs). These informed market participants of potential low residual situations and often requesting actions to ensure there is enough generation to cover demand. The fact that out of seven potential situations, only two had residual levels below 200MW demonstrates the reliability of the power system and proper management of these situations.

The CANs were released more than 16 hours in advance of low residual situations during 2023/24, on average, similar to the previous year when the notices were published more than 15 hours in advance on average.

Of the four events in 2023/24, only one escalated, requiring the system operator to publish a Warning Notice (WRN) informing the market participants of insufficient generation levels. The escalation in May 2024 was caused by a cold front that caused a spike in demand when supply was tight (due to low wind generation and decreasing hydro storage).

In summary, the management of low residual situations was properly conducted in 2023/24, contributing to the reliability of the electricity system. Note, this finding does not constitute an investigation into the system operator's compliance with its service provider obligations.

Effective management of dry years or emergency events

The 2023/24 year saw a shift from an El Niño Southern Oscillation (which peaked around September to November 2023) towards more neutral conditions (starting around April-May 2024).³⁷ During El Niño, New Zealand tends to experience stronger or more frequent winds from the west in summer, which can encourage dryness in eastern areas and more rain in the west.

Opposing the tendency, however, there were below-average hydro inflows into the main South Island reservoirs during the 2023/24 year. Consequently, the national hydro storage levels decreased from around 120% of long-term average in July 2023 to around 70% in June 2024. Hydro storage in 2023/24 was generally below average after August 2023, except for a few occasions when high inflows increased the storage levels for a short time.

Despite all the main reservoirs receiving lower-than-average inflows during at least one quarter during the 2023/24 year, and hydro storage also often reaching below-average values at those locations, there were no dry-year events in 2023/24.

Figure 17 shows the spot price and South Island storage as a percentage of average storage. Prices during 2023/24 were above \$100/MWh for most of the period, increasing and remaining above \$250/MWh when storage levels decreased further after April 2024.

35 www.ea.govt.nz/industry/monitoring

36 Once residuals are below the 200MW buffer set by the system operator, there is little room to manage any unforeseen changes in generation or demand (eg, a decrease in generation from intermittent sources or an unexpected outage) whilst maintaining standard reserve levels. For more information see: www.ea.govt.nz/documents/4012/Review_of_low_residual_and_insufficient_generation_events.pdf

37 See: NIWA - El Niño and La Niña

Planned outages, low wind generation and decreasing hydro storage levels were behind the price spike seen in December 2023. From April 2024 onwards, price spikes were mainly related to a combination of low wind generation and declining hydro storage. Such a situation also increased volatility in the wholesale market, especially when additional thermal generation was required to cover demand.

Figure 17: Management of dry years

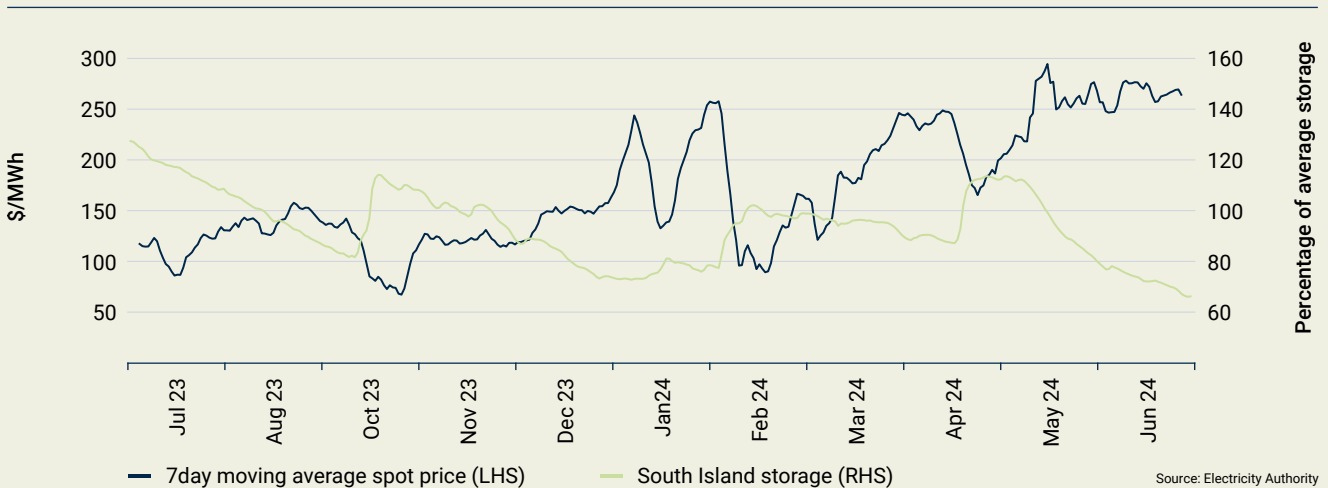


Figure 18 shows thermal generation and total New Zealand hydro storage. It has a strong inverse relationship, where prices increase as storage falls, making it economical for thermal generators to run. The relationship is evident when comparing the first and second quarters of 2024. Prices were often below \$100/MWh between January and February 2024 after inflow events increased hydro storage, and demand was relatively low, requiring less thermal generation. From May 2024 onwards, prices and thermal generation increased as hydro storage decreased.

In the second weekend of May 2024, extreme solar activity, which can cause damage to power grids, required the grid operator to preventatively remove several transmission lines from operation.³⁸ The system operator released grid emergency notices (GENs) describing which lines would be affected and how long they would be offline. In the end, there was no impact on New Zealand’s electricity supply, and the grid owner/operator was able to restore all electricity transmission circuits to service once the solar storm subsided.

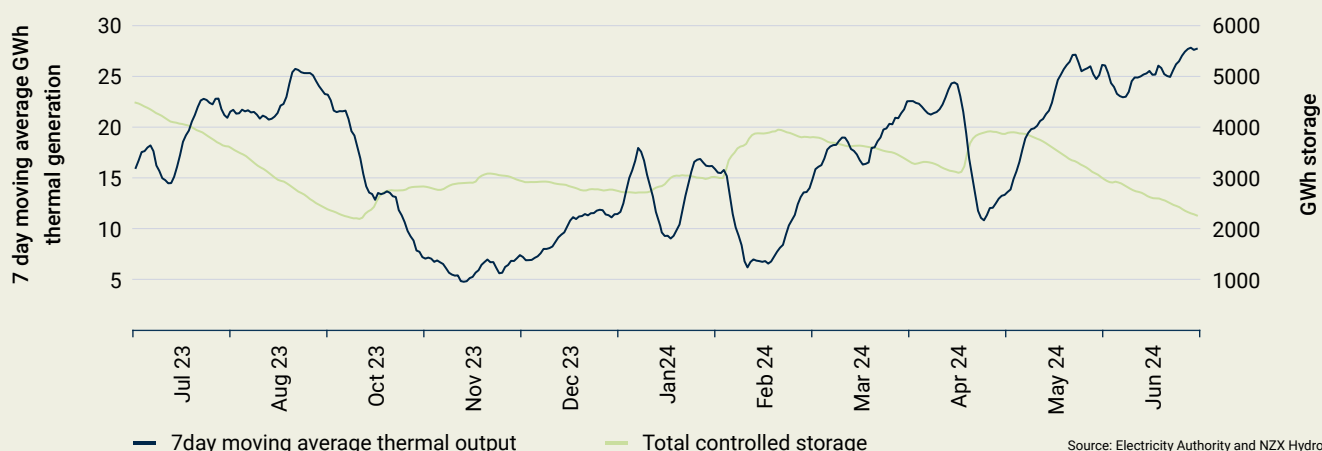
On 20 June 2024, a transmission tower located in a rural area near Glorit, north of Auckland, fell causing a major Northland outage and prompting the system operator to release GENs describing the affected circuit and providing estimated restoration times. The grid emergency was in place from 11.17am on 20 June 2024 until 4.00pm on Sunday 23 June 2024. The incident was caused by nuts being removed from three of the tower’s foundation legs during maintenance to the foundation baseplate, which caused the tower to collapse. Although most of Northland was reconnected later the same day, supply was limited until 23 June, when power was fully reestablished.³⁹ The Authority investigated the event as requested by the Minister for Energy under section 18 of the Act and delivered its final report on 13 September 2024.⁴⁰

³⁸ See: Transpower restores electricity transmission circuits after solar storm subsides, Transpower (2024)

³⁹ See: Transpower completes temporary tower replacement to restore further Northland electricity capacity, Transpower (2024)

⁴⁰ See: Electricity Industry Act 2010

Figure 18: Thermal generation and storage



Capacity and energy margins are within efficient bounds but more supply is needed

Capacity and energy margins⁴¹ are assessed and reported annually by the system operator. The latest security of supply annual assessment (2024) indicates that New Zealand energy margins are within the efficient bounds set by the Board whilst capacity margins can be impacted by the large amount of intermittent generation expected to be commissioned in the next 10 years.⁴²

The energy margins are assessed for the entire country and specifically for the South Island. The New Zealand Winter Energy Margin (NZ-WEM) is set to be between 14-16% whilst the South Island Winter Energy Margin (SI-WEM) is higher, between 25.5-30%. Capacity margins were developed for the North Island and during wintertime only (NI-WCM), ranging between 630-780MW.

Relative to the NZ-WEM, the system operator noted that the margins stay above the security standards for the 10-year assessment horizon when all consented new generating plants are included. When considering only the existing and committed plants, the margin falls below the security standard by 2030.

According to the system operator, the SI-WEM, even when considering consented projects, falls below the security standard by 2030. The system operator notes that the “development of consented and currently unconsented generation is needed to maintain the margins above the standards over the next 10 years”. The margin is also impacted by the electricity transfer capability between the islands, represented by the HVDC link.

The NI-WCM can fall below the security standard by 2027, considering only the existing and consented generating plants, according to the system operator. And even considering all committed and consented projects, the margin could still fall below the standard by 2029. A key reason for the capacity margin falling below the security standard earlier than the energy margin is that the new supply pipeline is mostly made up of intermittent generators, which have a lower contribution to peak capacity compared to controllable resources.

The system operator noted that, for the NI-WCM, additional projects that are not currently consented will be required to maintain the North Island capacity margin above the security standard over the assessment period.

Finally, the system operator also noted that early thermal exits or insufficient fuel to operate the thermal generating plants during dry years could accelerate the margins crossing the defined security standards.

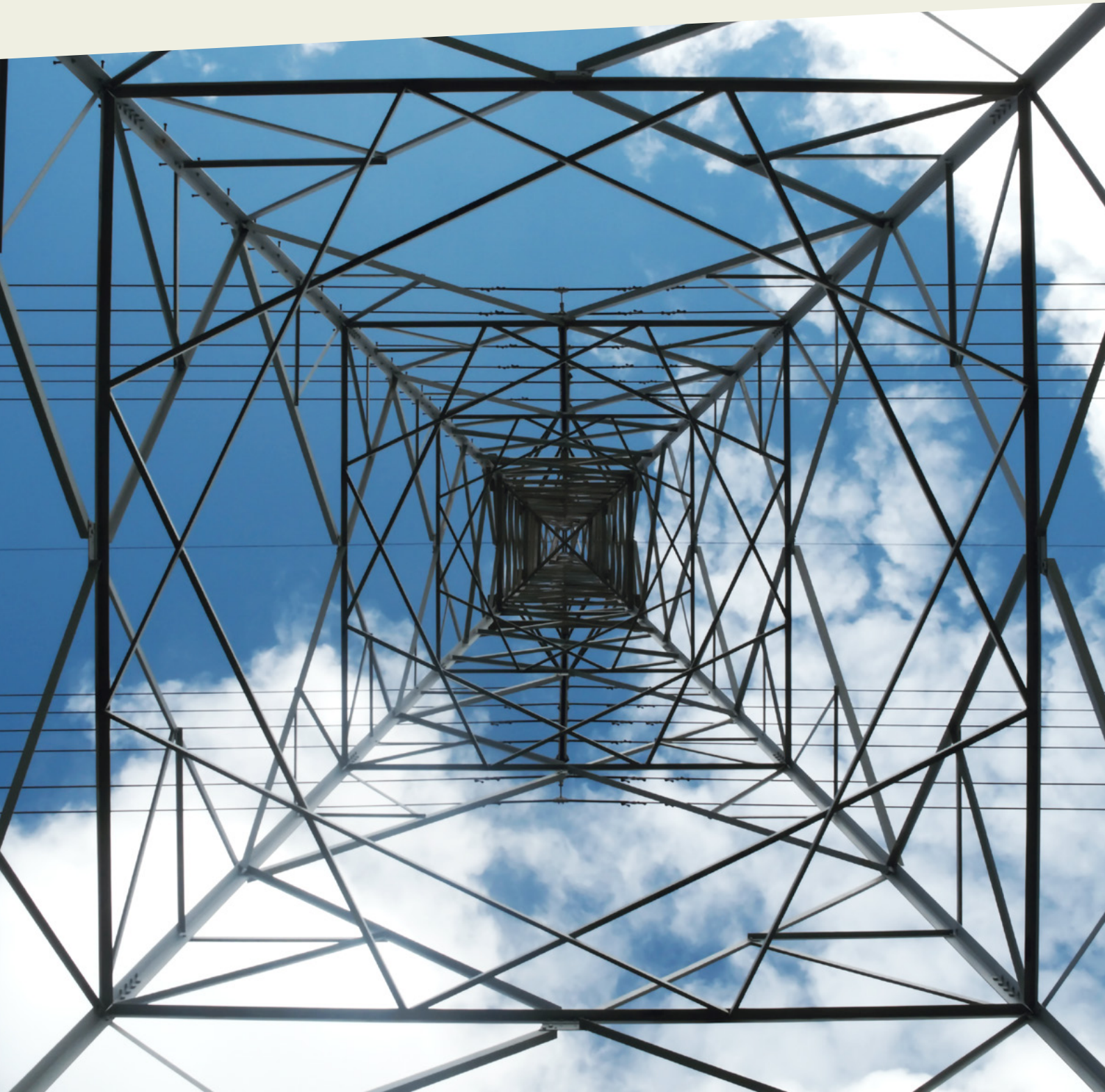
41 See: www.transpower.co.nz/system-operator/our-system-operator-role/security-supply-and-capacity

42 See: Transpower Security of Supply Assessment (2024)

Investigation of reliability events

There was one reliability event in 2023/24 caused by the fall of a power pylon near Glorit, north of Auckland, as discussed under the *Effective management of dry years or emergency events* section. The Authority investigated the event as requested by the Minister for Energy under section 18 of the Electricity Industry Act 2010, delivering our final report in September 2024.

It is worth noting that any low residual situation could potentially deteriorate into a reliability event; however, this did not happen in 2023/24, in part because of proper management of low residual situations by the system operator.



Efficiency

Measure 8: Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements

Statutory objective	Outcome measure	Source	Desired trend
Efficiency	Improved participant perceptions of the efficiency in electricity markets and transmission and distribution arrangements	Participant survey	Increasing

Percentage of participants who agree with a range of statements on the efficiency in electricity markets and transmission and distribution arrangements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The New Zealand electricity market ensures electricity is generated efficiently	2023/24	21%	22%	50%	7%	137
	2022/23	26%	18%	51%	5%	118
The New Zealand electricity market ensures electricity is transmitted efficiently	2023/24	9%	27%	59%	5%	137
	2022/23	10%	27%	54%	9%	118
The New Zealand electricity market ensures electricity is distributed efficiently	2023/24	21%	29%	44%	6%	137
	2022/23	27%	25%	40%	8%	118
New Zealand's wholesale market efficiently coordinates electricity production and consumption	2023/24	22%	19%	49%	9%	137
	2022/23	22%	14%	55%	9%	118
New Zealand's hedge market efficiently coordinates electricity production and consumption	2023/24	28%	23%	27%	23%	137
	2022/23	21%	23%	21%	24%	118
New Zealand's wholesale market efficiently facilitates timely investment in the electricity system	2023/24	36%	26%	24%	14%	137
	2022/23	43%	23%	24%	10%	118
New Zealand's hedge market efficiently facilitates timely investment in the electricity system	2023/24	37%	24%	18%	22%	137
	2022/23	30%	25%	22%	23%	118
Competition between electricity retailers promotes efficiency within retail operations	2023/24	39%	19%	35%	7%	137
	2022/23	39%	15%	41%	5%	118

Measure 9: Improved consumer perceptions of the efficiency of electricity in New Zealand

Statutory objective	Outcome measure	Source	Desired trend
Efficiency	Improved consumer perceptions of the efficiency of electricity in New Zealand	Consumer survey	Increasing

Percentage of consumers who agree with a range of statements on the efficiency of electricity in New Zealand:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
I can easily find and connect with an electricity provider	2023/24	3%	16%	78%	3%	1,033
	2022/23	4%	14%	79%	3%	1,006
Prices on my electricity bill fairly represent the actual cost of my electricity use	2023/24	24%	25%	45%	6%	1,033
	2022/23	21%	27%	46%	6%	1,006

Measure 10: Overall improvement across a suite of statistics on electricity system and market efficiency

Statutory objective	Outcome measure	Source	Desired trend
Efficiency	Overall improvement across a suite of statistics on electricity system and market efficiency	Authority data	Improving

Statistics

11. Futures prices reflect market conditions	Hedge prices reflected market fundamentals, suggesting futures prices are robust.
12. Dry year prices reflect storage levels	2023/24 dry year prices were higher on average than prices seen in 2022/23 due to low inflows and tighter gas supply seen in 2023/24.
13. Exceptional prices are justified by underlying fundamentals	The prices and bids during low-residual events aligned with expected market behaviour.
14. Constrained-on costs remained stable	Constrained-on costs have remained stable in 2023 when compared to 2022 despite the constrained-off costs ⁴³ increase over the same period.

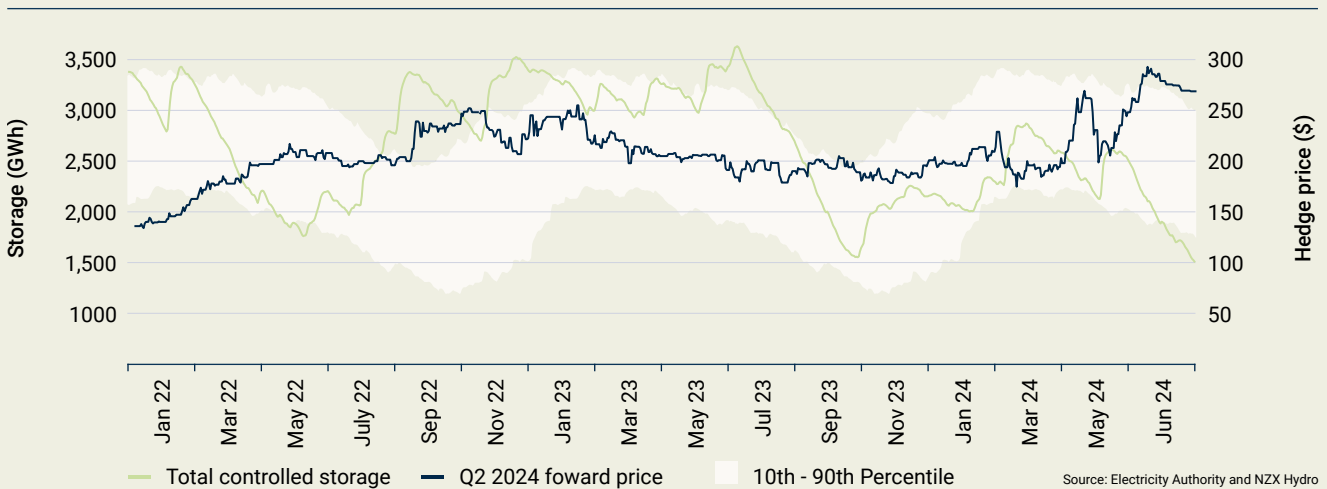
⁴³ Constrained-off compensation is an amount paid to generators, if they are required by the system operator to generate during a trading period when the final price is above the generator's offer price.

Futures prices reflect market conditions

Figure 19 shows the hedge price (statistic 11) for the ASX June 2024 quarterly baseload hedge at Ōtāhuhu and total national hydro controlled storage.⁴⁴ The chart demonstrates how the hedge price reflects market fundamentals.

The 2024 quarter 2 hedge prices rise above \$250/MWh, more than \$100/MWh above the price negotiated in the first quarter of 2022. The price reflects the underlying fundamentals, where prices spike closer to the time as there is more information on the potential physical electricity supply.

Figure 19: Futures prices



Source: Electricity Authority and NZX Hydro

Dry year prices reflect storage levels

Price spikes after December 2023 were often related to a combination of factors, including temperature, low wind generation, high thermal generation and sometimes above-average volume of generation plants on outage. Prices have also been impacted by tight gas supply, especially after the failed result from the Kupe South-9 well.⁴⁵

We continue to monitor electricity prices through the weekly trading conduct reports, undertaking and documenting further analysis on any unusual events.

Exceptional prices are justified by underlying fundamentals

From July 2023 to June 2024, there were only four events when actual generation residual levels dropped below 200MW, and although they were managed and resolved properly, their effect on spot prices was noticeable. For example, in the week of 5 May 2024 there were two such events, and the average wholesale spot price across all nodes was \$356/MWh during that week, \$115/MWh higher than the previous week. During the trading periods when residuals were low, spot prices reached above \$1000/MWh.

Beyond spot prices, low residual situation events can affect energy bids. For instance, several bids posted by electricity distribution businesses fell into the scarcity price (\$9,000/MW)⁴⁶ during the low-residual situation events.

The prices and bids during the low-residual events are, however, in accordance with expected market behaviour.

⁴⁴ Controlled hydro storage should be understood as the sum of the available water stored at the major reservoirs (Hawea, Manapōuri, Pūkaki, Taupō, Te Anau, and Takapō).

⁴⁵ See: KS-9 fails to deliver; Genesis trims forecast, Energy News (2024).

⁴⁶ Scarcity pricing is automatically applied in the market schedules when there is not enough generation or instantaneous reserve offered into the market to meet the forecast demand: www.ea.govt.nz/industry/wholesale/spot-market/scarcity-pricing/

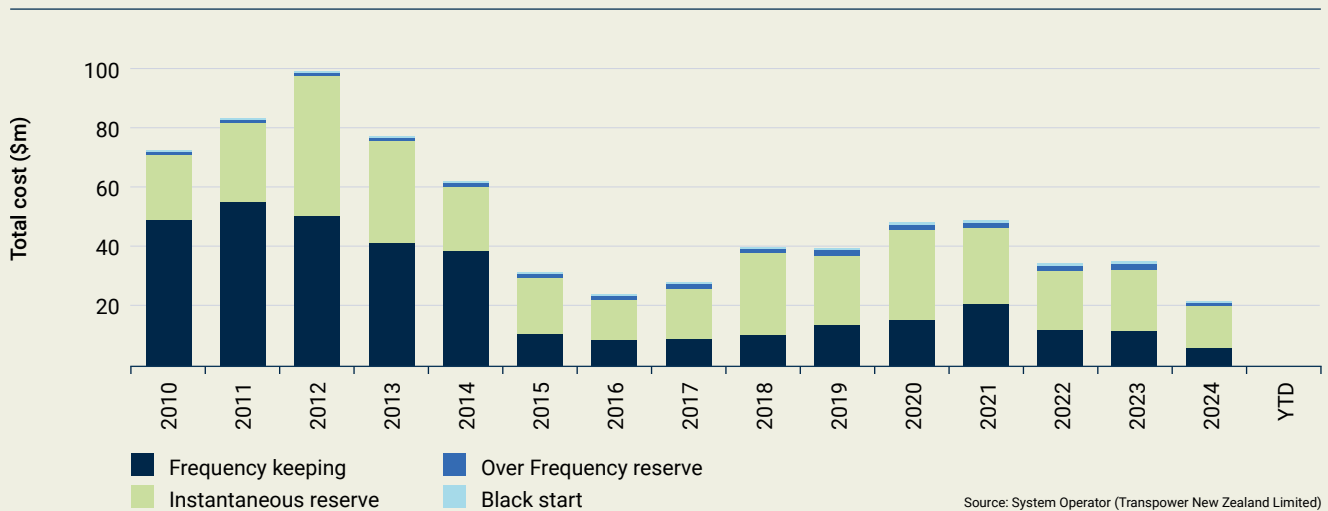
Constrained-on costs remained stable

Figure 20 shows the total ancillary services costs (statistic 14) from 2010 to 2023 calendar years and to June 2024. It shows overall costs have fallen since 2012. The downward trend that started in 2012 was broken in 2017, and a cost increase can be seen between 2018-21, although still much lower when compared to 2012. Costs again decreased in 2022 before rising slightly in 2023 (but still below 2018 levels).

The two main components of ancillary services are frequency keeping and instantaneous reserves.⁴⁷ These costs are affected by energy costs. The constrained-on costs have remained stable in 2023 compared to 2022 at around \$520k whilst the constrained-off costs increased over the same period from around \$2.7m in 2022 to around \$3.2m in 2023.

Constrained-on costs are also paid in the spot market to out of merit generators in certain circumstances. This occurs when the system operator requires generators to generate during a trading period where the final price is less than the generators' offer price. The Authority introduced new Code changes in March 2020 that removed these payments for ramping generation (generation that quickly increases or decreases to match demand). Constrained-off situations occur when the system operator requires generators to generate during a trading period where the final price is higher than the generators' offer price.

Figure 20: Ancillary



⁴⁷ Generation capacity and interruptible load that is made available to be used in the event of a sudden failure of a generation or transmission facility.

Appendix B

Survey-based impact measures

Low-emissions energy

Measure: Improved participant confidence in setting to facilitate an efficient transition

Percentage of participants who agree with the following statement:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
Electricity market settings will support an efficient transition of the energy sector to low-emissions	2023/24	32%	21%	42%	5%	137
	2022/23	42%	18%	36%	3%	118

Measure: Improved participant confidence in reliability as New Zealand transitions to low-emissions energy

Percentage of participants who agree with the following statement:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The electricity system will maintain reliability through the transition to low-emissions energy	2023/24	29%	20%	47%	3%	137
	2022/23	35%	25%	37%	3%	118

Consumer centricity

Measure: Improved participant perceptions in the electricity system's ability to meet consumers' ongoing needs

Percentage of participants who agree with the following statements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The electricity industry is meeting consumers' needs	2023/24	42%	14%	43%	1%	137
	2022/23	41%	15%	43%	2%	118
The electricity industry will meet consumers' evolving needs in the future	2023/24	29%	20%	49%	2%	137
	2022/23	31%	28%	39%	3%	118

Trust and confidence

Measure: Improved participant perceptions of trust and confidence in us and how we are fulfilling our role

Percentage of participants who agree with the following statement:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
I have confidence in the role the Electricity Authority plays as a kaitiaki of the electricity sector	2023/24	28%	28%	40%	4%	137
	2022/23	37%	32%	28%	3%	118

Measure: Improved participant perceptions of reliability and operational efficiency

Percentage of participants who agree with the following statements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The electricity sector operates efficiently	2023/24	38%	21%	41%	1%	137
	2022/23	34%	26%	38%	2%	118
The electricity system delivers a high level of reliability	2023/24	11%	19%	69%	1%	137
	2022/23	11%	19%	69%	1%	118

Measure: Improved participant perceptions of the quality of our monitoring

Percentage of participants who agree with the following statements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The Electricity Authority actively monitors market outcomes	2023/24	13%	20%	61%	5%	137
	2022/23	18%	19%	60%	3%	118
The Electricity Authority actively monitors participant behaviour	2023/24	17%	21%	57%	4%	137
	2022/23	18%	23%	57%	3%	118
The Electricity Authority holds participants to account for their actions	2023/24	27%	25%	44%	5%	137
	2022/23	34%	25%	38%	3%	118

Thriving competition

Measure: Improved participant perceptions of ability for new entrants to compete with established participants

Percentage of participants who agree with the following statements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
New entrant retailers can operate on a level playing field with established retailers	2023/24	51%	13%	22%	15%	137
	2022/23	52%	14%	20%	14%	118
New entrant generators can operate on a level playing field with established generators	2023/24	37%	19%	25%	19%	137
	2022/23	35%	21%	28%	16%	118

Innovation flourishing

Measure: Improved participant perceptions of the ability of the system to support rapid change

Percentage of participants who agree with the following statement:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The electricity regulatory environment supports incorporation of new business models and technology in a timely manner	2023/24	50%	24%	18%	8%	137
	2022/23	55%	25%	17%	3%	118

Measure: Improved participant perceptions of the current market settings' ability to encourage innovation

Percentage of participants who agree with the following statements:

Measure	Year	Disagree or strongly disagree	Neither agree nor disagree	Agree or strongly agree	N/a	Count (n=)
The current market settings encourage innovation in generation	2023/24	36%	27%	25%	12%	137
	2022/23	38%	31%	21%	10%	118
The current market setting encourage innovation in distribution network management	2023/24	45%	26%	16%	13%	137
	2022/23	49%	31%	15%	5%	118
The current market setting encourage innovation in consumer-facing services	2023/24	32%	23%	27%	17%	137
	2022/23	33%	28%	31%	8%	118
The current market setting encourage innovation in transmission network management	2023/24	26%	38%	17%	19%	137
	2022/23	27%	38%	16%	19%	118

Measure: Increased number of participants providing new services to consumers

Percentage of participants who report providing new services to consumers:

Measure	Year	No	Yes	Unsure	Count (n=)
In the past 24 months, has your organisation provided new products or services to consumers?	2023/24	51%	37%	12%	137
	2022/23	45%	42%	13%	118

