# **Appendix G** Assessment of the likely costs and benefits

Assessment of the costs and benefits of new retail data requirements

22 August 2024





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# 1 Executive summary

We assess that the Electricity Authority's (the Authority) amended proposal is likely to enable benefits significantly exceeding implementation and ongoing costs.

Our assessment of benefits is qualitative due to data limitations and difficult estimating benefits enabled by improved transparency, scope and quality of retail data. Our assessment of costs is primarily quantitative, relying on initial and updated estimates from retailers.

An important consideration for this assessment is that benefits are materially affected by how the Authority utilises retail data it receives (specifically, the extent to which it publishes data, metrics and insights, and uses the data to assess efficacy of existing policy interventions and inform future decision-making).

#### 1.1 Costs

We estimate per ICP compliance costs to be in a range from 20 cents to 30 cents per annum over ten years. This estimate includes initial implementation as well as ongoing costs and assumes approximately 2.1m residential and qualifying small business ICPs.

This assessment is based on cost estimates provided by retailers in submissions to the Authority's December 2023 consultation<sup>1</sup> and a subsequent Authority request in June 2024 to update cost estimates in light of amended data requirements. We note:

- costs are likely to be front-loaded, with investment to automate reporting and relatively low ongoing costs
- updated (June 2024) retailer cost estimates indicate compliance costs will be less than half of earlier estimates.

The Authority is likely to incur one-off costs to establish procedures to receive and process received data, and develop metrics, insights and

potentially tools to assist stakeholders' consumption of information it publishes.

#### 1.2 Benefits

Benefits do not arise from receipt of the data per se, but from arise from the Authority utilising the data and assisting stakeholder utilisation. As a result of those actions by the Authority, benefits will accrue to consumers, retailers and electricity sector participants through improved:

- **monitoring**, visibility and understanding of retail market performance and effectiveness of current policy interventions
- future decision-making as participants and the Authority will have the information to make better informed, evidence-based operational, investment and policy decisions
- reporting of retail market operations and performance as a result
  of publication by the Authority of retail data,<sup>2</sup> metrics, analysis and
  analytical tools.

Table 1 summarises our assessment of the level of benefits from improved Authority utilisation of different types of retail data as a result of the proposed amendment. This shows seven data categories where potential benefits are 'very high' and multiple areas where benefits are 'high' or 'medium' respectively.

Table 1: Assessment of benefits by data category

Indicative benefits	Data categories
Very high	Base data, network charges, debt and disconnections, medically dependent consumers, load control, consumption and demand response, consumer care

<sup>&</sup>lt;sup>1</sup> Four retailers and the Electricity Retailers Association of New Zealand provided cost information. Refer Appendix B.

<sup>&</sup>lt;sup>2</sup> Publication of data would comply with privacy requirements, for example by anonymising and or aggregating.



High	Switching, pricing, competition, complaints, retailer stress	
Medium	Bundling, phasing out of discontinued pricing and fee arrangements, credit checks for new customers	

More broadly, we consider increased transparency and stakeholder understanding of retail market operation and performance will support decision making by all parties.

#### 1.3 Net benefits increase over time

After initial implementation, we expect costs to be comparatively low as reporting is automated and assurance processes become embedded. We expect periodic investment will be required if data requirements change and for lifecycle management. We expect processing cost to fall or, at worst, remain flat as computing efficiency improves.

As the population increases, and societal reliance on electricity increases with decarbonisation and electrification, so too do the benefits arising from greater transparency, more effective market monitoring and timely and effective decision-making.

# 1.4 Critical assumption

While costs are front-loaded and sunk, benefits depend on initial and ongoing action by the Authority. Specifically:

- not utilising data received to monitor the efficacy of existing policy interventions and or to inform future policy analysis will limit the Authority's ability to achieve their statutory objective
- not publishing retail data and insights will limit stakeholders' abilities to utilise this information in decision making and in their participation in policy making process.

If those actions do not occur or are ineffective then benefits as assessed in this report may be materially lower.



### 2 Context

# 2.1 Background

The Electricity Authority's (Authority) primary objective is "to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers".

While protecting consumer interests is implicit in the primary objective this was made explicit in December 2022 through an additional objective "to protect the interests of domestic consumers and small business consumers in relation to the supply of electricity to those consumers".

The Authority considers<sup>3</sup> that existing mechanisms for collecting retail data are insufficient to adequately monitor the retail market, consumer outcomes, and the effectiveness of the Consumer Care Guidelines. It has limited reliable information on a range of retail market areas, notably around retail pricing and outcomes for domestic and small business customers, such as arrear levels, disconnection numbers and fees.

Some stakeholders are also concerned about the Authority's retail market data collection, including that:

- the mechanisms contain overlapping questions which impose unnecessary costs on participants
- some questions can be interpreted in various ways
- the Authority does not publish the data it collects.

#### 2.2 Consultation

In response, in December 2023 the Authority consulted on proposals to streamline collection of retail data with a single data request to improve its monitoring of the retail market. The Authority sought feedback on:

<sup>3</sup> Refer to Section 3, Improving retail market monitoring: clause 2.16 consultation, December 2023.

<sup>4</sup> Publication of data would comply with privacy requirements, for example by anonymising and or aggregating.

- whether its proposed single data request would be fit for purpose
- potential costs and benefits of the proposed single data request
- any concerns about publishing anonymised retail data.<sup>4</sup>

In its consultation, the Authority considered and consulted on a preferred option and three alternatives for obtaining the information it requires. These are, in summary:

- 1. a new ongoing clause 2.16 information notice (preferred)
- 2. requesting the information under Section 46 of the Act
- 3. a new or amended voluntary request
- 4. amending the current clause 2.16 Retail Financial Stress notice.

These options relate primarily to the mechanism by which the Authority obtains the information (rather than the information it obtains or how it uses the information).

The Authority assessed these options against five assessment factors to ensure that retail market monitoring is:5

- 1. comprehensive (i.e. it fills identified information gaps)
- 2. mandatory (i.e. it delivers information covering all necessary ICPs)
- 3. consolidated (i.e. it consolidates all current retail data requests)
- 4. transparent (i.e. the data is available for publication)
- 5. cost-effective (i.e. the monitoring minimises costs on participants and the Authority).

# 2.3 Proposal

The Authority's preferred approach (the original proposal) was for a new ongoing information notice for retail market data under clause 2.16 of the Electricity Industry Participation Code 2010 (the Code). Clause 2.16 allows

<sup>&</sup>lt;sup>5</sup> Refer to Section 4, Improving retail market monitoring: clause 2.16 consultation, December 2023.



the Authority to publish a notice specifying information a participant must provide to assist the Authority with its monitoring functions. The new notice would replace existing retail market data collection mechanisms with a comprehensive set of retail market data.

The Authority proposed to publish metrics developed from data from this new notice in monitoring reports such as the quarterly market performance review, and on its Electricity Market Information (EMI) website. The Authority considers the data received would enable greater understanding of the retail market, better monitoring of current policy interventions, and support better evidence-based decision-making in future.

The Authority received over 30 submissions from consumers, consumer advocates, retailers, retailer advocates, lines companies and other stakeholders. While there is broad support for the single data request proposal, concerns were raised about the practicality and cost of meeting some of the proposed data requirements.

During the consultation period the Authority held a webinar and published questions and answers. On completion of the consultation the Authority adjusted its proposals to address cost and practicality concerns raised by submitters, specifically by retailers who would bear compliance costs.

The Authority communicated these adjustments to retailers in a detailed briefing document and held a workshop with retailers to discuss amended proposals. This led to further (minor) refinements and was followed by a request from the Authority to retailers to provide updated implementation and operation cost estimates.



# 3 Analysis of proposed changes

# 3.1 What does the status quo look like?

At present the Authority obtains information from retailers to inform its monitoring, reporting, regulatory and enforcement actions. This information is obtained:

- through a variety of means
- on a combination of mandatory and voluntary bases
- at various frequencies (monthly, quarterly, annual and ad-hoc).

The Authority's current sources of retail market data are summarised in Table 2 below.

Table 2: Existing sources of retail market data<sup>6</sup>

Category	Information	Basis	Frequency
Retailer and consumer financial distress data	Retailer Financial Stress Notice	Mandatory (clause 2.16 of the Code)	Monthly, since October 2022
Consumer Care Guidelines	Domestic customer debt, disconnections for non-payment, number of medically dependent consumers, referrals to Work and Income.	Voluntary (Part 10 of the Guidelines)	Quarterly
Consumer Care Guidelines	Retailer consumer care policy and alignment statement	Voluntary (Part 10 of the Guidelines)	Annual
Annual voluntary areas request	Mix of information to assist Authority assessing interest areas	Voluntary	Annual
Registry and consumption data	Detailed ICP and higher-level data maintained by market participants (retailer, distributors, generators)	Contract (registry manager) and voluntary (participant data)	Monthly

Some stakeholders are also concerned about the Authority's current approach to retail market data collection.

# 3.2 What do the proposed changes look like?

The Authority's amended proposal, after consultation the process outlined in section 2.2, is to issue a new ongoing information notice for retail market data under clause 2.16 of the Code.

The notice from the original proposal has been modified significantly in response to stakeholder feedback. Specifically, it addresses cost and practicality concerns through scope changes, format changes, longer implementation times and reduced historical information requirements.

The Authority's amended notice (the amended proposal) has three key policy changes relative to the status quo:

- 1. Consolidating current retail data requests into a single request
- 2. Making this a mandatory request under section 2.16
- 3. Expanding the scope of retail data (relative to status quo) with monthly data provision.

Figure 1 shows the impacts of these policy changes on retailers and the Authority.

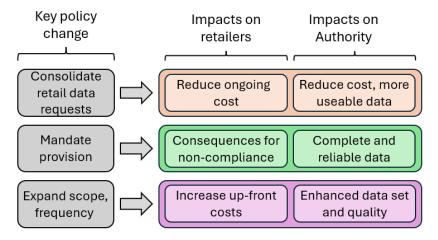
As noted in section 2.1 above, the Authority considers<sup>7</sup> that existing mechanisms for collecting retail data are insufficient to adequately monitor the retail market, consumer outcomes, and the effectiveness of the Consumer Care Guidelines.

<sup>&</sup>lt;sup>6</sup> The Authority has paused retail data requests in some areas (pending completion of the retail data project) to avoid imposing avoidable cost on retailers.

<sup>&</sup>lt;sup>7</sup> Refer to Section 3 of the Improving retail market monitoring: clause 2.16 consultation, December 2023.

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Figure 1: Impacts of key policy changes



# 3.3 Our assessment methodology

We have reviewed the Authority's December consultation, stakeholder submissions and subsequent adjustments to the Authority's original proposal to address cost and workability concerns raised by retailers.

We have reviewed cost estimates provided by retailers in response to the December 2023 consultation and to the Authority's amended clause 2.16 notice in June 2024.

As part of this process, we have we have qualitatively assessed the impact of each policy change on both the Authority<sup>8</sup> and retailers. These costs and benefits are assessed against a counterfactual of the status quo.

The qualitative assessment is supported by semi-quantified analysis using a combination of retailer cost estimates and approximations of costs.

<sup>&</sup>lt;sup>8</sup> For brevity we refer to 'the Authority' as the beneficiary of improved retail data. However, it is ultimately consumers, market participants and other stakeholders that benefit from the Authority's use of the data for reporting and policy making.



# 4 Costs and benefits

In this section we assess the impact of the Authority's amended proposal on costs and benefits. In section 0 we assess how future trends are likely to affect costs and benefits over time.

# 4.1 Summary of costs and benefits

Our assessment is that status quo retail data arrangements broadly served the originally intended purpose but are not (a) cost effective (b) fit for the Authority's current and future purpose.

Our assessment is that there will be higher up-front and lower ongoing costs relative to the status quo but that costs will be similar in present value terms.

The Authority's amended proposal will fundamentally improve the quantity, comprehensiveness, quality and usability of retail data relative to the status quo. It is not the receipt of improved data per se, but what receipt of this data enables. Specifically, the amended proposal enables a significant uplift in three key areas:

- the Authority and stakeholders' ability to monitor and fully understand retail market performance and monitor current policy interventions
- 2. stakeholders' contribution to and the Authority's ability to make fully informed, evidence-based decisions in relation to aspects of the retail market
- the Authority's ability to prepare and publish retail market performance metrics in monitoring reports such as the quarterly market performance review, and on its Electricity Market Information website (EMI).

Importantly, benefits available from utilisation of enhanced retail data depend largely on subsequent actions by the Authority and stakeholders.

For the purposes of this assessment, we assume the Authority utilises the data as intended.

Table 3 summarises likely costs and benefits under the status quo and the Authority's proposal.

Table 3: Summary of costs and benefits

	Status quo	Authority proposal
Costs:	Moderate	Moderate
Retailer one-off costs	Low	Moderate
Retailer ongoing costs	Moderate	Low
Retailer PV costs	Moderate	Moderate
Authority one-off costs	Low	Moderate
Authority ongoing costs	Moderate	Low
Authority PV costs	Moderate	Moderate
Benefits – retail data enables:	Low	High
Preparation and publication of retail market metrics and monitoring reports	Low	High
Effective monitoring of current policy interventions	Low	High
Effective evidence-based decision- making	Low	High

## 4.2 Costs

## 4.2.1 Status quo costs

Data on the costs of complying with these requests, including producing multiple responses for each request, is not available for the status quo. However, due to the non-consolidated nature of this arrangement we consider it is reasonable to assume:

 each request will impose administrative costs to produce (for the Authority), and to interpret and project manage (for retailers)



 each response will impose production costs to obtain, process and report (for retailers), and interpretation costs (for the Authority).

As such, retailer compliance costs under the status quo can be summarised in the formula below:

Absent actual cost information we cannot provide a definitive view of costs under the status quo. However, we can provide a simplified but plausible estimate of costs for a hypothetical retailer:

- There are currently four data requests, seeking eighteen individual responses in total, per year.
- Assuming a hypothetical retailer's average cost per response is around \$2,900<sup>9</sup> (including interpretation, processing and production) then its annual cost of current requirements would be approximately \$52,200.
- The ten-year present value (using a 7% discount rate) of compliance costs under the status quo is \$366,631 per retailer over ten years and \$5.12m in total for the fourteen retailers serving over 1000 ICPs.
- Individual retailer costs will differ according to the number of individual responses each retailer provides, and their individual production and interpretation costs.

We are only interested in the costs for retailers that serve over 1000 ICPs, as the amended proposal will only apply to these retailers (meaning the costs for other smaller retailers will remain the same regardless of this change). At present there EMI indicates:

the five largest retailers serve 88.5% of ICPs

the ten largest retailers serve over 99% of ICPs

fourteen serve over 1000 ICPs each.

The Authority also incurs costs under the status quo to issue requests, to follow up responses, and, to process responses into useable form to meet its needs. We do not have Authority cost data for status quo or its amended proposal, however, we consider that under the status quo Authority costs will be based on a similar formula to the above but will be somewhat higher than those of an individual hypothetical retailer. This reflects that the Authority needs to develop and authorise each request, communicate to retailers, follow up with retailers and then process responses.

## 4.2.2 Amended proposal costs

Under the amended proposal retailers are asked to respond to one consolidated and mandatory clause 2.16 request on a monthly schedule. The amended proposal gathers more retail data but is designed to support automation. Retailer feedback and cost estimation confirms responses will be highly automated (more so than under the status quo).

Retailer feedback and cost estimates highlighted workability and cost issues that can be partially or fully mitigated through scope of data requirements and related matters (such as implementation lead times) enabling easier automation and simplifying initial and ongoing compliance.

Retailers were asked to provide cost estimates for different scope and implementation lead-time scenarios. Responses helped substantiate earlier concerns raised and allowed the Authority to settle positions in several areas.

While retailer cost estimates differ, all responses indicate:

- comparatively high up-front costs to develop systems and automate production of monthly data requirements
- higher costs for shorter implementation lead times

<sup>&</sup>lt;sup>9</sup> This assumes 1.5 days of internal administrative labour (at \$600/day) and 2.5 days of data preparation and quality assurance (at \$800/day).



comparatively low ongoing monthly / annual costs.

This is summarised in the formula below:

Appendix B summarises retailer cost information. This shows a wide range of estimates between different retailers. This range may be due to different estimation methods as well as differing assumptions regarding individual retailers' system requirements, development capabilities, and resource costs.

While caution should be exercised in interpreting any single retailer estimate, it is possible to approximate likely costs from the aggregate information provided. Retailer cost estimates indicate average:

- one-off costs of \$245,000 to implement IT system and business process changes to enable initial and ongoing compliance
- ongoing operating costs of \$38,457 in the first year of implementation, reducing to \$24,620 in subsequent years
- indicative ten-year present value costs of \$414,824 per retailer (using a 7% discount rate), totalling \$5.81 million in total for the 14 retailers serving over 1000 ICPs
- variability of cost estimates with significantly higher costs for large retailers than for the smallest retailers.

We estimate per ICP compliance costs to be in a range from 20 cents to 30 cents per annum over ten years. This estimate includes initial implementation as well as ongoing costs and assumes approximately 2.1m residential and qualifying small business ICPs in year one.

The Authority's costs to receive and process retail data are likely to be somewhat higher than under the status quo.

#### 4.2.3 Assessment of costs

While cost profiles differ between the status quo and the Authority's amended proposal, costs appear similar (or slightly higher) on an NPV basis. We consider it reasonable to assume that status quo costs may be largely or wholly avoided once prevailing requests cease.

Retailer estimates indicate that these compliance costs have reduced significantly from the original proposal in December 2023.<sup>10</sup> We note that the Authority's consultation on amended proposals provides a further opportunity to refine cost estimates and potentially identify efficiencies.

#### 4.3 Benefits

Benefits associated with retail data provision arise principally from enhancing the Authority's ability to effectively:

- prepare and publish retail market performance metrics in monitoring reports such as the quarterly market performance review, and on its Electricity Market Information website (EMI)
- fully understand the retail market performance and monitor current policy interventions
- make fully informed, evidence-based decisions in relation to aspects of the retail market.

These translate into benefits as per the following equation.

However, for the Authority to effectively carry out the functions listed above, it must collect good quality retail data. As discussed in section 2.2, this is data that is comprehensive, mandatory, consolidated, transparent and cost-effective to produce and utilise.

 $<sup>^{\</sup>rm 10}$  Four retailers and the Electricity Retailers Association of New Zealand provided cost information. Refer Appendix B.



## 4.3.1 Status quo benefits

Retail data currently requested by the Authority has evolved over time, largely in response to specific retail market concerns such as retail financial stress and consumer care.

The Authority has traditionally issued an annual voluntary request seeking information on topics of concern or particular interest. The Authority obtains information from the Registry and the Registry transfer hub.

The data currently gathered under the status quo is of value to the Authority for achieving its original purpose, but as noted in section 3 of the December consultation, it does not meet the Authority's current and future needs:

- There are deficiencies in the scope, form and basis of data collection that limit its utility by the Authority and the benefits available to consumers and stakeholders.
- Data currently being collected is either unable, or inadequate, to capture the full range of activities and highlight the full range of market outcomes that matter to consumers.
- There has been legislative change that necessitates a fresh look at how retail data is acquired and used. In particular, the Authority has a new additional statutory objective to protect the interests of domestic and small businesses in their dealings with participants in relation to their electricity supply.

These concerns about the quality of retail data currently collected are broadly shared by stakeholders, including:

- insufficient collection and monitoring of domestic hardship information
- the non-publication of retail financial stress and other retail market data (resulting in a failure to supply transparent information on overall market outcomes)
- the inability to link retail data to socio-economic data at an individual consumer level

 overlapping questions and interpretation issues with current data requests.

## 4.3.2 Amended proposal benefits

Benefits under the amended proposal are assessed against the same framework as for the status quo.

Under the amended proposal retailers are asked to respond to one consolidated, expanded and mandatory clause 2.16 request on a monthly schedule with an annual compliance statement.

#### Consolidating current retail data requests into a single request

In many cases under the status quo, data inconsistencies and gaps severely impact useability, limiting or preventing use of data already gathered for market monitoring and reporting, monitoring of policy effectiveness and future policy development and decision-making.

The Authority's proposal to consolidate retail data requirements into a single request will:

- standardise data format, frequency of provision, and handover conventions
- remove ambiguity, avoid overlaps and better enable linking of different datasets.

Consolidating retail data requests will materially improve the usability of the data gathered. This will make it considerably easier for the Authority to prepare and publish retail market performance metrics.

Importantly, while consolidating is necessary and likely beneficial on its own, potential benefits are limited if data provision is voluntary and by the scope of data provided.

#### Making data request mandatory under section 2.16

At present three of four retail data requests issued by the Authority are voluntary. This constrains what the Authority can ask of retailers and its ability to require (and enforce) data provision, inclusion of specific data, frequency of provision, specify data quality, format, transfer protocol or publication. The Authority is effectively a taker of whatever data retailers



choose to provide – with retailers able to opt out altogether or of individual requirements.

Mandating retail data provision allows the Authority to specify its requirements of retailers and, subject to reasonableness, ensures the Authority receives data that:

- is comprehensive so that all necessary ICPs are covered and retailer interactions with consumers across the entire market are monitored.
- contains all necessary information (see scope section below).
- is conducive to improved transparency and, in turn, policy monitoring and decision making because it is:
  - o of known quality so can be relied upon.
  - presented in a specified format (to a specified frequency, using specified transfer protocols) so can be efficiently processed, published<sup>11</sup> and incorporated into standard reporting cycles, policy monitoring and analytical processes.

Importantly, while mandating is necessary and likely beneficial on its own, potential benefits are limited by the scope of data.

# Expanding the scope of retail data (relative to status quo) with monthly data provision

At present retail data requirements are limited in scope. They do not include data critical to forming a developed understanding of the operation and performance of retail markets, for the effectiveness of existing policy interventions or for evidence-based decision-making.

The Authority's amended proposal is to expand the scope of retail data collected, specifically to monitor retail market competition, reliability and efficiency. This will include collecting data on:

<sup>11</sup> Publication of data would comply with privacy requirements for example by anonymising and or aggregating.

- monthly billing data by ICP, including plan type, fees, discounts, rate/cost per kWh and contract length
- half hourly consumption metering data for certain customer types
- information on the how electricity is bundled with other services
- the relationship of consumer switching to ICP tariff rates.

The amended proposal also aims to monitor domestic and small business consumer outcomes, including the operation and effectiveness of the Consumer Care Guidelines. This will include collecting data on:

- segmentation of consumer subsets such as small business, prepay customers, medically dependent consumers and customers in arrears
- ICP level data on timeframes for reconnection after disconnection for non-payment and associated information
- aggregated data on complaints and refusals to service due to creditworthiness.

Data scope expansions materially improve the type and completeness of data available to the Authority. These changes allow the Authority to publish comprehensive, complete and reliable information on the operation and performance of the retail market, the efficacy of existing policy interventions and future policy analysis and decision-making.

## 4.3.3 Assessment of benefits

As discussed in more detail in Appendix A, the combination of consolidating data requests, mandating provision and expanding the scope of data gathered has potential to materially improve:

- the Authority's understanding of retail market performance and its monitoring current policy interventions
- the Authority's ability to make fully informed, evidence-based decisions in relation to aspects of the retail market



 the information available to market participants through retail market performance metrics in monitoring reports published by the Authority (such as the quarterly market performance review) and on its Electricity Market Information website (EMI).

#### Improved monitoring and reporting

Improved monitoring and reporting of the operation and performance of the retail market is likely to provide tangible benefits to:

- Consumers and their advocates additional information could provide the evidence needed to validate or dispel perceptions over the competitiveness of the market, the performance of individual retailers. This is potentially a profound and empowering change that is likely to improve the ability of consumers and their advocates to participate effectively in policy making in this increasingly important but complex market.
- Retailers improved reporting will provide timely, empirical
  information that is not currently available. This allows retailers to
  assess own company and peer performance with insights used to
  inform product design and pricing, customer service protocols,
  education and support initiatives. This can help retailers improve
  customer outcomes and competitiveness, and to reduce
  investment decision risk.
- All stakeholders in building a deeper understanding of the retail
  market, its overall performance and that of individual retailers.
  Additional information published by the Authority is likely to
  significantly reduce current information asymmetries and enable
  all stakeholders to more confidently assess the effectiveness of
  current policy interventions and future policy development and
  decision-making.

#### Improved monitoring of current policies and future decision-making

Improved monitoring of current policies and design of new policies is likely to provide tangible benefits through:

 improving the ability of the Authority (and stakeholders) to promptly and confidently diagnose and remediate nonperformance of existing policy interventions

- reducing the risk of 'false positives' resulting in unnecessary or incorrect interventions that impose unnecessary costs or reduce the benefits available from individual interventions
- reducing the risk of 'false negatives' resulting in a decision not to intervene or to delay intervention when timely intervention would result in lower costs or higher benefits
- improving consumer confidence in the integrity and performance of the electricity market, and confidence that the Authority has the information it requires to diagnose and address areas of nonperformance, market or regulatory failure should they arise.

Appendix A shows how benefits may arise from planned or likely use of data gathered under the amended proposal and the data that enables this. It links to the Authority's work programme and indicative benefits in each area. A high-level summary is shown in Table 4 below.

Table 4: Assessment of benefits by data category

Indicative benefits	Data categories
Very high	Base data, competition, network charges, debt and disconnections, medically dependent consumers, load control, consumption and demand response, consumer care
High	Switching, pricing, competition, complaints, retailer stress
Medium	Bundling, phasing out of discontinued pricing and fee arrangements, credit checks for new customers



# 5 Trends

There are various trends that will affect the costs and benefits of the amended proposal over time.

#### 5.1.1 Cost trends

After initial implementation, we expect costs to be comparatively low as reporting is automated and assurance processes become embedded. We expect periodic investment will be required if data requirements change and for IT system lifecycle management. We expect processing cost to fall or, at worst, remain flat as computing efficiency improves.

If future changes to requirements were to impose significant additional costs, we would expect a separate assessment of costs and benefits.

#### 5.1.2 Benefit trends

In contrast to costs, we expect benefits to increase over time. Table 5 summarises how we expect benefits to change over time.

Table 5: Summary of benefit trends

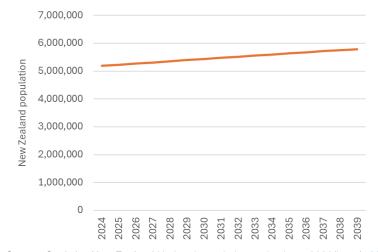
Factors	Expected trend	Rationale
Value to stakeholders of market reporting	Increase	Expected to increase as economic value of electricity services increases.
Efficacy of monitoring of current policy	Increase	Expected to increase as economic value of electricity services increases.
Efficacy of future decision-making	Increase	Expected to increase as economic value of electricity services increases.

Number of consumers	Increase	Expected to increase by approximately 12% over the next 15 years.
Overall	Increase	

#### 5.1.3 Number of consumers

New Zealand's population is expected to grow by around 12% over the next 15 years, meaning there will be more people affected by electricity market dynamics and the Authority's policies. As such, the benefits arising from improved access to retail data by stakeholders and the Authority can be expected to rise over time.<sup>12</sup>

Figure 2: Population growth



Source: Statistics New Zealand National population projections: 2022(base)-2073 | Stats NZ

#### 5.1.4 Decarbonisation and electrification

The benefits of improved transparency of electricity market performance, improved monitoring of the efficacy of existing policy interventions and

<sup>&</sup>lt;sup>12</sup>StatisticsNZ, national population projections, 50<sup>th</sup> percentile estimate.



improved future decision-making are affected by the importance of electricity to consumers.

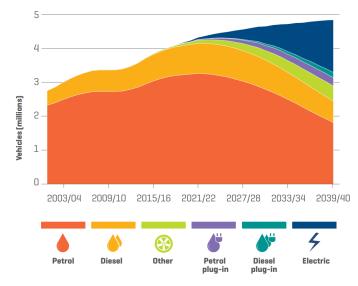
Currently, without access to electricity, some consumers can still cook, heat homes and water with gas, and fill their cars with petrol. <sup>13</sup> However, these are increasingly being replaced by electrified alternatives because of broader electrification trends driven by:

- consumer awareness of the importance of decarbonisation (and other health impacts from some of these alternative fuels)
- increasing costs of alternative fuels
- reducing costs of electrified alternative appliances, vehicles, etc.

This trend towards electrification increases the utility and value of reliable and competitively priced electricity to consumers and New Zealand's economy as a whole.

As shown in Figure 3, the uptake of electric vehicles is likely to increase dramatically. We expect similar trends in other areas including space and water heating as gas use reduces in response to environmental policy, cost increases and declining availability. The effect of this is to increase reliance on, and the utility of, electricity for consumers over time.

Figure 3: Projected number of vehicles by fuel type



Source: Ministry of Transport TransportOutlookFutureState.pdf

<sup>&</sup>lt;sup>13</sup> While there are many other functions that use fuels other than electricity, as mentioned previously we note that some of these still require electricity to function (e.g. some forms of gas heating).



# 6 Sensitivity analysis – higher costs and lower benefits

# 6.1 Higher costs

If implementation costs or ongoing costs are higher than expected the scale of net benefits could be reduced. Retailers indicated the following factors that could lead to higher implementation costs or ongoing costs:

- A shorter implementation period resulted in higher implementation costs. For example, a twelve-month implementation period would reduce average one-off costs by \$48,400.
- Requiring significant amounts of historical information would increase costs (noting that only one respondent provided a cost estimate for providing such data).
- Requiring half hour consumption data to be linked to each consumer's pricing plan would increase cost, though limited cost information was provided to support this.

We note that future change to retail data requirements may result in additional costs. We do not attempt to estimate these as any material change is likely to be subject to a separate cost-benefit assessment.

We assume that the Authority accepts data will be provided from operational systems, and that:

- data provided each month may be subject to minor change for operational reasons and no ex-post correction of prior submissions is required
- 2. an annual compliance statement will provide assurance that data provided to the Authority reflects the retailer's best understanding at the time provided.

Imposing stringent quality checks and or certification of monthly submissions is likely to increase costs and increase time taken to provide the data.

#### 6.2 Lower benefits

If the Authority fails to utilise retail data gathered under the new clause 2.16 notice in the manner anticipated, then benefits will be reduced, potentially significantly. For example:

- not publishing retail data<sup>14</sup> and insights will limit stakeholders' abilities to utilise this information in decision making and in their participation in policy making process
- not utilising data received to monitor the efficacy of existing policy interventions and or to inform future policy analysis and decisionmaking will limit the Authority's ability to achieve their statutory objective.

#### 6.3 Assessment

Costs would need to be materially higher than estimated and/or benefits materially lower than assessed for the amended proposal to result in net costs.

We expect this is unlikely because:

- costs are unlikely to be materially higher than estimated, as:
  - the Authority has been flexible to date in modifying the draft clause 2.16 notice to improve workability and reduce cost for retailers
  - a bill is currently before Parliament that will legislate that consumer data held by firms must be provided to that consumer or a trusted third party on request. This may require retailers to invest in data management and reporting systems, increasing costs under the status quo (and therefore reducing the incremental costs of complying with the amended proposal)

<sup>&</sup>lt;sup>14</sup> Publication of data would comply with privacy requirements for example by anonymising and or aggregating.



• benefits are unlikely to be materially lower than assessed, as stakeholders will be able to hold the Authority to account if it delays or fails to publish retail data<sup>15</sup> and reporting as expected, or if it fails to utilise retail data in the manner expected in its policy monitoring and decision making.

<sup>&</sup>lt;sup>15</sup> Ibid.



# 7 Conclusion

Our assessment is that benefits enabled by the Authority's proposal will significantly exceed costs associated with implementation and ongoing compliance. This is because incremental benefits (relative to the status quo) are likely to be substantial, while incremental costs are likely to be small in comparison.

If implementation costs are higher or lower than estimated, then net benefits will be higher or lower.

Benefits are materially affected by how the Authority uses data it receives. Specifically, to maximise potential benefits the Authority needs to:

- promptly produce and publish retail market metrics, underlying data (where possible<sup>16</sup>), analysis and tools to assist stakeholders in developing their understanding of the retail market, is operation and performance
- proactively utilise data received to assess efficacy of current policy interventions (and act to address sub-optimal policy interventions)
- proactively utilise data received to improve the efficacy of future decision-making.

<sup>&</sup>lt;sup>16</sup> Ibid.

# Appendix A. Information utility and benefit

Retail data gathered under the amended proposal will be used to by the Authority to develop and publish metrics developed in monitoring reports such as the quarterly market performance review, and on its Electricity Market Information website (EMI). As noted in section 6.2, benefits are likely to be materially lower if the Authority fails to publish the data as planned.

Publishing these metrics will enable greater understanding of the retail market and allow market participants, consumers and the broader public to assess for themselves the performance of the retail market and individual retailers, to identify gaps or opportunities which may inform product, investment or other decisions, and for research and policy analysis.

The retail data will also enable better monitoring of current policy interventions and support better evidence-based policy making by the Authority in the future. The table below is a non-exhaustive summary of planned or likely use of data categories, potential benefits and links to the Authority's work programme.

Table 6: Information utilisation and potential benefit

Key area	Authority work programme	Data	Indicative benefit
General retail market analysis	Multiple workstreams, including competition and improving customer choice	Base data	Very High
Pricing	Competition, improving customer choice, consumer care	Tables 1 and 2, specifically Rates, Total billed, Electricity revenue, fixed term Boolean	High
Switching	Competition, improving customer choice	Rates and product offering, fixed term Boolean, bundling Boolean, low user Boolean, prepay Boolean, spot price Boolean, currently available Booleans, rates, incentive flags, discount data. Existing switching data	
Competition	Competition, improving customer choice and others		
Bundling	Competition monitoring and others	Bundling Booleans, rates, discounts and fees, half hourly consumption	Medium
Network charges  Distribution pricing, default distributor agreements, transmission pricing  Distribution pricing, default distributor agreements, from networks about how they charge retailers		Very High	



Key area	Authority work programme	Data	Indicative benefit
Debt and disconnections	Consumer protection/mandating Consumer Care Guidelines	All data in table 3, plus debt information from table 1a of the amended notice. Monthly questions on debt and disconnections	Very High
Monitoring regulation changes	Compliance, EPR, phase out of low user fixed charges, end of prompt payment/late payment phase out of discontinued pricing and fee arrangements	mpt payment/late payment	
Credit checks and bonds	Mandating Consumer Care Guidelines	Aggregated question on credit checks. Aggregated question on bonds	Medium
Medically dependent customers (MDCs)	Mandating Consumer Care Guidelines	MDC Boolean, disconnections, rates, TOU Booleans etc. Aggregated questions on MDC applications, status, disconnections.	Very high
Complaints	Mandating Consumer Care Guidelines	Analysis of questions on complaints	High
Retailer stress Ifinancial help  Competition monitoring, risk management review prudentials  Total owing by account, aggregated question on arrears. Link with prudentials		High	
Load control	.oad control Competition monitoring, system resilience, distribution involvement in flexibility services, managing peak electricity demand		Very high
Consumption and demand response  Competition monitoring, system resilience, distribution involvement in flexibility services, managing peak electricity demand, updating regulatory settings for distribution networks		Rates, half hourly data, load controlled flag	Very high



# Appendix B. Retailer cost information

# **Summary**

Retailer costs to comply with Authority's amended proposal are estimated at \$441,824 per retailer (present value over ten years) compared with earlier retailer estimates of approximately \$1.1m and our equivalent estimate of \$366,631 for costs under the status quo.

# Status quo

No status quo compliance cost information was available, so these estimates are based on assumptions.

Table 7 presents cost estimates under the status quo based on the current number of requests and individual responses and with assumptions as to the number of days required to provide responses and the associated labour costs. Implied cost per ICP under the status quo is approximately 24 cents per annum.

Table 7: Status quo indicative costs

Basis	No. of	Cost per	Annual cost	Ten-year
	responses	response		NPV
Per retailer	18	\$2900	\$52,200	\$366,631
All retailers with >1000 ICPs (14 retailers)	252	\$40,600	\$730,800	\$5,132,833

# Amended proposal (July 2024)

In response to an Authority request, ten retailers provided indicative cost estimates for meeting the new consolidated, mandatory and wider-scoped

clause 2.16 retail data request. Table 8 and Table 9 present the range of implementation and ongoing cost estimates provided by retailers, as well as the median and mean estimate (all on a per retailer basis).

Implied cost per ICP for the amended proposal is approximately 28 cents per annum.

Table 8: Amended proposal indicative implementation costs

Basis	Lowest	Highest	Median	Mean
	estimate	estimate	estimate	estimate
2 months	Considered infeasible			
Implementation cost (6 month)	\$20,000	\$550,000	\$207,500	\$245,000
Implementation (12 month)	\$20,000	\$550,000	\$152,500	\$196,600

Table 9: Amended proposal indicative ongoing costs

Basis	Lowest estimate	Highest estimate	Median estimate	Mean estimate
First year	0	\$100,000	\$32,500	\$38,457
Year 2 onwards	0	\$100,000	\$5000	\$24,600

# Original proposal (December 2023)

Cost information was provided by four submitters and the Electricity Retailers Association of New Zealand (ERANZ). The only publishable information was that provided by ERANZ, which is representative of estimates by the four retailers. ERANZ stated:



"The cost to retailers is tied to the scope and time given to comply with these new Authority requirements. While various individual elements of the data request make sense, in the aggregate, it becomes a substantial compliance cost for retailers to fulfil and the provision is for a short two-month commencement period. The costs to retailers come from system changes and quality assurance processes. For each ERANZ member, these compliance costs are estimated at approximately \$500,000 to \$1 million minimum (if not more), and the system changes will take between six to twelve months minimum (if not more) to complete. Multiplied across all retailers, this is an extremely significant project."

As no estimate was made of ongoing compliance costs we adopted updated retailer cost estimates provided in June 2024 for ongoing costs.

Implied cost per ICP of the Authority's original (December 2023) proposals was 59 cents per annum.

Table 10: Original proposal indicative implementation and ongoing costs

Basis	Implementation cost	Year one	Year two onwards	Ten-year NPV
Per retailer	\$750,000	\$38,457	\$25,000	\$886,787
All retailers with >1000 ICPs (14 retailers)	\$10,500,000	\$538,400	\$350,000	\$12,415,019

#### **General observations**

Retailer responses show that:

• a two-month implementation period is unlikely to be achievable

- changes made by the Authority in response to stakeholder feedback have reduced estimated compliance costs by more than 50%
- if a twelve-month implementation period were adopted then oneoff costs could be approximately \$48,400 lower.

We note variability in cost estimates amongst retailers. This may be due to estimation differences, different information systems or processes, or a combination thereof.