

# Summary of our decisions on Aurora Energy's investment plan



## Foreword

We were aware from the outset that evaluating Aurora Energy's proposal to spend more money on its network would involve unique challenges that have not been present during past considerations of previous customised price-quality path (CPP) proposals.

Aurora's historic underinvestment in maintenance and asset renewals has resulted in the safety and reliability of its network deteriorating. The level of expenditure needed to replace failing infrastructure and bring the network up to standard is significant and will come with a substantial cost to consumers.

Given these issues, it was vital that we put consumers at the centre of the Commerce Commission's consultation in relation to our decision-making process. While the set of criteria we used to assess Aurora's proposal did not change, we undertook extensive public consultation and concerns we heard have been kept front of mind during our deliberations and have been responded to in this decision.

The Commission would like to take this opportunity to acknowledge and thank Aurora for its efforts in preparing this CPP proposal and engaging with the Commission throughout our deliberations. We would also like to thank those who have participated in this process, including community organisations, local government, and businesses within the electricity sector.

We particularly want to thank Aurora's consumers for engaging with us over the past eight months. We have seen higher individual consumer engagement on this energy regulatory process than any other we have overseen. This reflects the importance of Aurora's services to local communities and the depth of feeling and concern they hold.

At a time when COVID-19 has severely impacted the local economy, we know an increase in energy bills will come at a difficult time for Otago communities. We also understand that they want a safe and reliable electricity supply, but we recognise they remain deeply concerned about whether they can afford to pay for it.

What also became clear during our discussions was the lack of trust and confidence consumers have in Aurora's ability and commitment to deliver on this plan, with this sentiment stemming from Aurora's historic performance.

Individuals and businesses, particularly those in Central Otago and Queenstown Lakes, also told us of their concerns about regional differences in levels of service quality, pricing, and investment and responsibility for the under investment which has led to the current position.

We recognise the depth of feeling held by consumers about Aurora's past performance. However, this CPP process cannot adjudicate on historical failings, decide who can and cannot own Aurora's assets, or direct its management on how to run its business. Our responsibility has been to assess Aurora's proposal for a customised price-quality path, and to ensure its accountability within the legal framework set out in Part 4 of the Commerce Act and the regulatory rules which currently apply to all electricity distribution businesses.

Ultimately, we are required to assess whether Aurora’s investment plan is well-justified and if its spending will be efficient. We are required to look forward and primarily focus on the long-term benefits to consumers from a safe and reliable network, rather than the affordability of electricity prices and the wider economic context.

We have been conscious of the financial impact of this plan on consumers as much as possible within the constraints of our regime. We have not approved expenditure without being satisfied it is prudent and efficient for Aurora to make the required infrastructure improvements. We also expect Aurora to make substantial operational cost savings over the length of the CPP period.

We have also decided to cap Aurora’s revenue increases over the five-year CPP period. Combined, these decisions will reduce the short-term price impact on consumers compared to Aurora’s proposal. Some of the price increases will be pushed into the future as Aurora works towards the long-term benefit of a safe and reliable network.

As part of our consultation process, the Commission received a number of submissions on aspects of the draft decision from Aurora, its consumers, and other stakeholders. These have been considered, and where appropriate, changes have been made that result in a more informed and robust final decision.

Alongside our final CPP decision, we are also seeking feedback on additional reporting measures that are aimed at improving the transparency of Aurora’s performance and making it more accountable to different communities across its network.

It has taken many years for the issues on Aurora’s network to materialise, and it will take some years to fix them. Together, our CPP decision and proposed reporting requirements present a package of measures that we consider will help improve Aurora’s performance over time. With these decisions made, the onus is now on Aurora to engage with its consumers, rebuild trust, and deliver on its plan.

**Sue Begg**  
Deputy Chair

**John Crawford**  
Associate Commissioner

**Derek Johnston**  
Commissioner

**Elisabeth Welton**  
Commissioner

## Executive Summary

On 12 June 2020, Aurora Energy Limited (Aurora) applied for a customised price-quality path (CPP) to increase its regulated revenues in order to repair and upgrade its electricity lines network and recover the cost of its spending from its consumers.

This paper details the decision we have made in relation to Aurora's CPP proposal. Alongside this decision we have released the details of the additional information disclosure requirements we are proposing to improve Aurora's accountability to consumers across its network.

Aurora is subject to price-quality regulation under Part 4 of the Commerce Act. This means that we determine the maximum revenue it can recover from its consumers and the minimum quality standards – measured in terms of the number and duration of outages on its network – it must meet. How the network is managed within these parameters is a matter for Aurora's Board and management.

Until now, Aurora has been on a default price-quality path (DPP). The DPP applies to every non-exempt electricity distribution business that is not on a CPP. It is set every five years using a standard regulatory assessment, based on the previous performance and spending forecasts of the regulated businesses.

As a result of historic underinvestment, the safety and reliability of Aurora's network has deteriorated significantly in recent years. This resulted in Aurora breaching the quality standards we had set it in the DPP between 2016-2019. We brought proceedings against it in the High Court and it was fined \$5 million.

Having recognised the deteriorating condition of its network, in 2017 Aurora began increasing its investment and maintenance spend to urgently address safety risks. It filed a proposal for a CPP in June 2020 as it believes its current DPP will not permit recovery of the spending required to continue this work and operate a safe network at current levels of reliability. By applying for a CPP, Aurora is seeking a bespoke price-path based on a close assessment of the current state of its network and proposed investment plan.

Aurora proposed to spend \$383.3 million over three years, or \$609.3 million over five years, to replace ageing infrastructure and run its network. This is around \$119.6 million or \$177.0 million more respectively than what it would be permitted to recover under the current DPP, which began on 1 April 2020.

We acknowledge what we have been told about the importance of Aurora's performance to local communities and the depth of concern they hold about its current position. Aurora has nevertheless largely made the case for urgent and ongoing investment in its network set out in its proposed CPP to be included in the revenues it recovers from consumers. Without this CPP, its network would continue to deteriorate, safety incidents would increase, and consumers would experience more frequent and longer outages.

Aurora preferred a three-year CPP period, but we consider a five-year period offers greater long-term benefits for its consumers. We have assessed Aurora's plan and our decision would lower its proposed spending from \$609.3 million to \$563.4 million – a reduction of \$45.9 million (7.5%). This would be made up of:

- \$327.4 million of the \$356.3 million proposed for capital expenditure;<sup>1</sup>
- \$236.0 million of the \$252.9 million proposed for operating expenditure.

Our decision on Aurora's capital spending reflects our view that it has largely made the case for the increased investment. Most of the proposed capital spending has been approved, with the difference between our decision and Aurora's proposal mostly attributable to the timing of when this work is required.

We consider Aurora has overestimated the amount of money it needs to run its network. We have not approved \$16.9 million of operating expenses that in our view are not prudent and efficient.

Overall, we have approved more expenditure than what was proposed in our draft decision. This is largely as a result of further analysis of evidence provided by Aurora that made the case that the spending was justified.

The CPP sets the maximum revenues that Aurora can recover from its consumers as a whole. We do not control how Aurora prices within the revenue cap we have set. How Aurora sets its prices is subject to the pricing principles established by the Electricity Authority. However, if it were to recoup less revenue than it is allowed in any given year, it can recover the remainder (along with interest) at some future date.

Aurora is not bound by the spending allowances that we have set. It can spend more or less and move expenditure between categories to best manage its operations and deal with changes in conditions. However, Aurora must absorb a portion of the cost of any expenditure above the limit we set, meaning it cannot be fully recovered from consumers.

To help mitigate the impact of increased bills on consumers we have decided to cap Aurora's total line charge revenue over the five-year CPP period. Annual increases will be limited to approximately 10% per year plus or minus any changes from the Consumer Price Index (CPI) forecasts we have used. There is provision also for changes in forecast Transpower transmission charges to be passed through to consumers.

Our draft decision also included an alternative scenario to cap revenue increases at 5% in the first year with a 10% increase in subsequent years. We have concluded that this scenario is likely to result in deferral of revenue recovery beyond the next regulatory period, and would expose consumers to considerable interest costs arising from the deferral. We therefore decided not to proceed with this scenario.

Our decision substantially reduces the amount able to be recovered through increased lines charges compared to Aurora's proposal. However, the total increased expenditure we have allowed, including some already undertaken, will still result in substantial price increases.

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1. All dollars are \$2021, unless otherwise specified

We are also deferring more revenue recovery to the future than envisaged by Aurora's proposals or our draft decision. That will result in a higher revenue requirement and higher price increases than otherwise would be the case in the next regulatory period.

Aurora has recently announced that monthly line charges will increase by between \$4 to \$10 for the standard household consumer<sup>2</sup> for the year beginning 1 April 2021. Our analysis suggests that these increases would rise to around \$32 to \$51 by 2026, depending on consumers usage and location. Aurora's announced price increases are consistent with the revenue we have allowed for year one of the CPP period.

Given the state of Aurora's network, we accept that it is necessary to adjust its quality standards to better reflect its likely performance. In practice, we consider Aurora should be capable of meeting targets on the number and duration of network outages that are higher (ie, worse) than historical levels up until 2015, but similar to what it has actually been achieving over the past four years. Overall, this should see reliability stabilise at current levels before gradually improving over time.

We also want to improve Aurora's accountability for work across its network. Alongside our CPP decision we have released our draft decision on proposed additional reporting measures, aimed at improving the transparency of Aurora's performance and making it more accountable to different communities across its network.

These proposed measures include requiring Aurora to publish an Annual Delivery Report which describes the work it is delivering for consumers during the CPP period. It is proposed Aurora be required to present a summary of this report to consumers at public meetings in each of its three regions. We are also proposing that Aurora reports more clearly on service quality issues, such as voltage quality monitoring practices, and how it sets its regional prices.

We are proposing that Aurora will also be required to procure a report mid-way through the CPP from an independent expert (or experts) that provide an opinion on aspects of Aurora's performance to ensure that the Commission, and other interested persons across its network, can effectively conduct their own assessments of Aurora's performance.

Taken together, our package of measures is focused on the long-term benefit to Aurora's consumers. It will take some time, and cost, to put Aurora back on the right track, but consumers will eventually be better off having Aurora efficiently and prudently invest in the security and reliability of their electricity supply.

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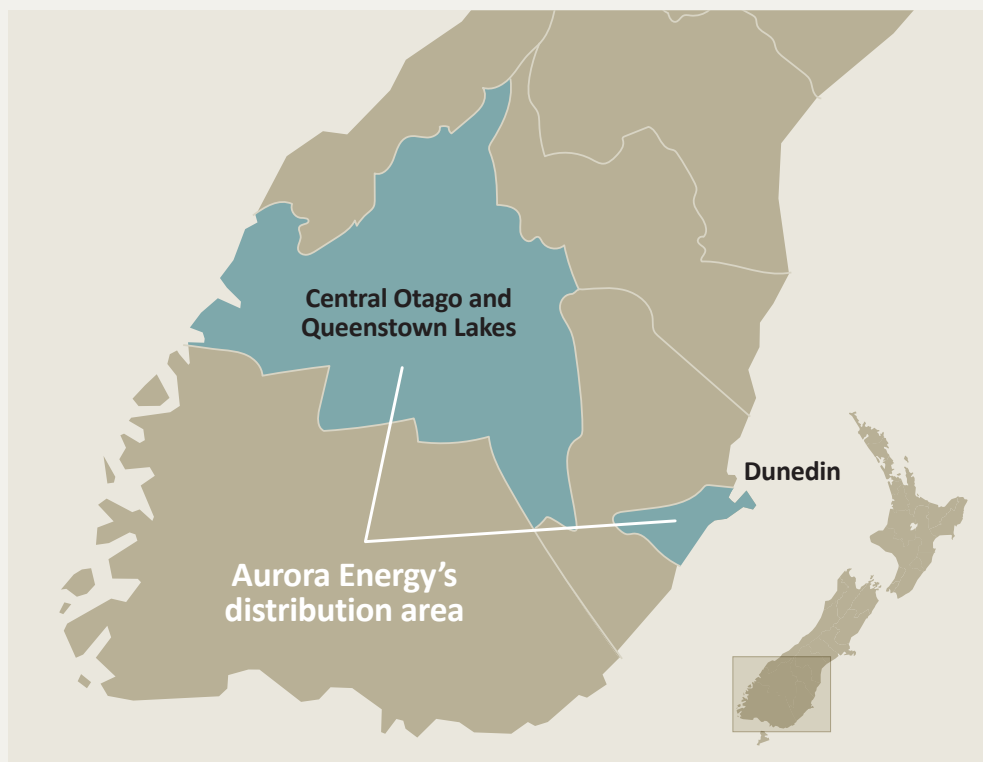
2. Aurora's announcement of the line charge increase defines standard residential household as one using 9,000 kilowatt hours per year

## Context of Aurora's CPP

Aurora owns and operates New Zealand's seventh largest electricity lines company by consumer connection numbers. Its network provides electricity lines services to about 90,000 consumers in Dunedin, Central Otago and the Queenstown Lakes District.

Aurora is a wholly owned subsidiary of Dunedin City Holdings Limited, which in turn is owned by Dunedin City Council.

**Figure X1 Aurora Energy's distribution area**



### Historic underinvestment

The core of Aurora's network was predominantly built in the 1950s and 1960s. As it has aged, the condition of its assets has deteriorated and the risk to the public and its employees has increased.

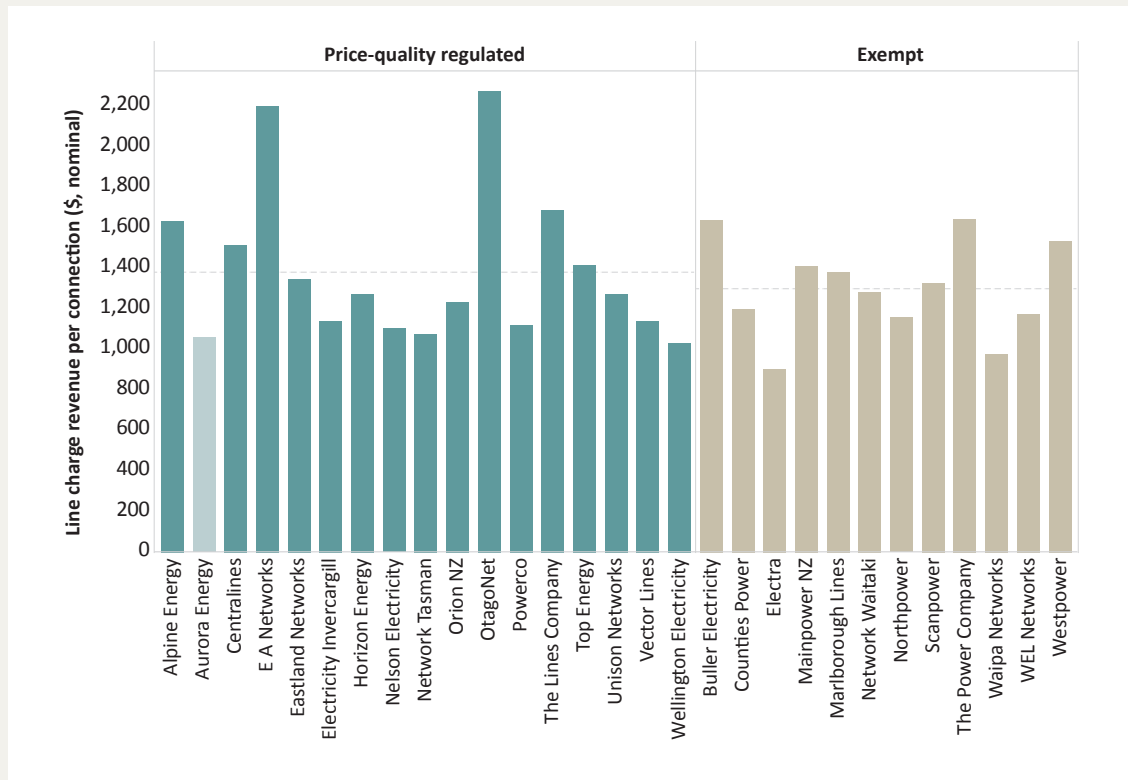
There have been a number of documented safety incidents in recent years, including both power poles and live electricity lines falling to the ground. An independent review of Aurora's network identified there were over 300 overhead line, pole and crossarm failures between 2015-2018, of which 61 were classed as serious hazard events.<sup>3</sup>

Aurora's ageing network has been inadequately maintained due to underinvestment going back many years. As a result, it is providing an increasingly less reliable service to consumers. The average number and duration of outages has risen significantly over the past 10 years and would continue to worsen if action is not taken.

Aurora's level of underinvestment over many years is consistent with its relatively low historical revenues. This can be seen when comparing a snapshot of its revenue on a per consumer basis with other electricity lines companies in New Zealand over the 2013-2019 period.

3. [WSP "Independent review of electricity networks - Final report - Aurora Energy" \(21 November 2018\)](#), Table 7.2 p. 48.

**Figure X2 Aurora's revenue per customer per year 2013-19 (dashed line is the average)**



If Aurora had recouped the average revenue per consumer of the 17 price-quality regulated lines companies, then each of its consumers would have paid on average \$321 more per year in lines charges over this 2013-2019 period (inclusive).

In other words, Aurora's consumers have collectively been paying less for their electricity lines services in recent years when compared with most New Zealanders, particularly when accounting for the geography of its network.

Furthermore, Aurora's profit on a per consumer basis over the same 2013-2019 period was among the lowest of all lines companies. This implies Aurora has not earned excessive levels of profit from its consumers. Rather, it appears its low level of investment enabled it to maintain artificially low prices for its consumers over many years.

Aurora could have applied for a CPP much earlier than it did, but it did not. As a result, it is in catch-up mode and needs to undertake a significant amount of investment over a short period of time to improve safety and stabilise the reliability of its network.



## Aurora's plan

In recent years, Aurora recognised the deteriorating condition of its network and began significantly increasing its investment and maintenance spend to urgently address safety risks. This work was informed by the 2018 WSP state of the network report we encouraged Aurora to commission following our investigation into its quality standard breaches.

Through its CPP proposal, Aurora has sought approval to increase its prices to cover part of the cost of the additional expenditure to date, but also to fund a continued large expenditure programme from April 2021.

Aurora applied for a three-year CPP as opposed to the five-year default period, as it believed its forecasts that underpinned its proposal were more robust for the initial three years, compared with years four and five. It signalled it would then make a second proposal for the following five years, once it had better asset data allowing it to forecast its expenditure more accurately.

In developing its plan, Aurora undertook its own community consultation. This included a series of public meetings, consumer surveys and the publication of a consultation document which its consumers could provide written submissions on. It also established a Customer Advisory Panel (CAP) to provide an independent consumer voice to help inform its plan.

### Independent Verifier

As part of the CPP process we agreed with Aurora to appoint Farrier Swier Consulting and GHD (together, the Verifier) as an independent expert to assess its proposal and provide a report to accompany it. With the assistance of Strata Energy Consulting, we then tested the verification report and the techniques and methods the Verifier used to assess Aurora's proposal. We undertook further analysis as suggested by the Verifier.

Overall, we consider the Verifier's report to be generally robust. It assessed the bulk, but not all, of Aurora's proposal and identified matters it considered we should consider further. Our findings are similar in most areas, but differ in a small number of others as a result of our further investigation.

## What Aurora's consumers and stakeholders told us

Given the scale of Aurora's proposal and likely price impacts, we recognised that it was important for us to engage directly with Aurora's consumers and make ourselves and our processes as accessible as possible for them, in order to better understand their views and concerns.

We sought feedback from stakeholders throughout our assessment process. In particular we published an Issues Paper in July 2020 describing the key issues we had identified from our initial assessment of Aurora's proposal, and our draft decision in November 2020. We followed the release of these papers with a series of public meetings with local residents in Dunedin, Alexandra and Cromwell. Planned meetings in Queenstown and Wanaka unfortunately needed to be cancelled following the release of the Issues Paper due to a sudden change in COVID-19 alert levels and were instead held online.

The feedback we received when talking with stakeholders and residents in Dunedin, Central Otago and Queenstown Lakes broadly covered the same themes and issues addressed in the written submissions we received. A summary of the points raised at each public meeting has been published on the Commission's website.

Some submissions raised concerns that some aspects of the consultation process, such as timing allowed for submissions or the technical nature of the proposal, did not provide stakeholders enough of an opportunity to consider the issues or engage in a substantive way. However, the timeframe for our evaluation allowed under the Act was limited to 150 days and we had to balance the extent and nature of consultation with the need to undertake detailed analysis of the proposal.

Aurora considered that some of the public meetings held across the region did not achieve the objective of consulting on details of the Commission's draft decision and took issue with aspects of the meetings, such as the conduct of the participants. It also noted that some of the matters that were discussed were not relevant to our consideration of its CPP proposal. We agree that some matters raised were outside of what we can take into account when setting a CPP, and we did not have regard to considerations that we did not consider relevant to our CPP decision.

Overall though, we consider the stakeholder engagement to have been a valuable and important process. Despite operating within relatively tight timeframes we have seen greater individual consumer engagement on this energy regulatory process than any other we have overseen. Feedback from this engagement has informed our deliberations and contributed to a more robust final decision.

We do acknowledge that there are always improvements that can be made to our engagement processes. We are committed to using the experience and feedback to increase the effectiveness and accessibility of our future engagement programmes.

Figure X3 What we heard



A downloadable version of this document is available [here](#).

## What we cannot do

Submitters raised a number of issues during consultation that, although relevant to Aurora's business activities, sit outside our responsibility or ability to address.

**Table X1 Issue raised by stakeholders and the entities responsible for addressing them**

Issue	Responsible
<b>Regional pricing differences</b>	Electricity Authority and Aurora
<b>Price increase for distributed generation</b>	Electricity Authority
<b>Whether Aurora's owners should contribute more to the network rebuild</b>	Dunedin City Holdings and Dunedin City Council
<b>The overall structure of the electricity market</b>	The Government (via MBIE)
<b>Aurora's health and safety practices</b>	Worksafe NZ

Three issues in particular were raised frequently with us during the public meetings and in written submissions. These were:

- affordability of price rises
- Aurora's ownership and governance, and
- regional pricing differences.

### Affordability of price increases

Submitters told us the proposed price rises would impose financial stress on many of Aurora's consumers and was especially problematic for those on fixed incomes (notably superannuitants and those in receipt of welfare benefits) who may already be struggling due to the impacts of COVID-19.

Price rises would also create difficulties for a region that has cold winters and is increasingly reliant on electric heating for air-quality reasons. They could also potentially harm the competitiveness and viability of some commercial consumers who feared they would face large price rises at a time of reduced demand in the economy.

We acknowledge the communities' concerns about the potential financial impact of price rises on individuals and businesses and understand that some consumers are worried that their income cannot stretch to cover a price rise. However, we have limited ability to address affordability and energy poverty issues as part of the CPP process or through our wider powers under the Commerce Act.

We are instead required to assess the facts of Aurora's proposal: whether its proposed spending is prudent and efficient and that it promotes long-term benefits to consumers. To the extent we are able to take considerations of price shocks and affordability into account, we have done so, such as capping revenue increases over time.

We set the maximum revenues Aurora can recover from its consumers as a whole but cannot control how this is priced for individual consumers. It is open to Aurora to assess affordability in any price increases it may wish to implement. But there is a cost to its consumers in doing so, as ultimately Aurora can recover these deferred revenues (along with interest) at some future date.

## Aurora's ownership and governance

Many submitters felt that Aurora's owners should bear most of or all of the cost of fixing the network. They considered this could be achieved by requiring the owners to take out a loan, pay back past dividends or sell part of the network and use the funds obtained to pay for the repairs. Some submitters further argued that as Dunedin consumers owned the network, via Dunedin City Council, only they should pay.

Under Part 4 of the Commerce Act we can only regulate Aurora's operation as a lines company. We do not have the power or ability to decide who owns a lines company or direct the owners on how to manage or invest in their business. These matters are ultimately for the owners, Dunedin City Holdings and Dunedin City Council. However, it should be noted that changing ownership or management will not change the need for investment, its timing or its cost, and therefore the potential for higher prices.

## Regional pricing differences

Aurora divides its network into three regions for the purposes of charging its consumers: Dunedin, Central Otago and Queenstown Lakes. Submitters raised several concerns about the fairness of this pricing approach, with residents in Central Otago and Queenstown Lakes saying they believe they are already subsidising Dunedin and expect it to get worse.

The responsibility for network pricing lies primarily with Aurora with oversight of another regulator, the Electricity Authority. It is aware of these concerns from its participation in the public forums, and has recently released an independent report on Aurora's regional pricing<sup>4</sup>.

We are proposing that Aurora should be required to explain its pricing approach and regional calculations to its consumers in different parts of its network through our proposed additional information disclosure requirements.

## Our decision package

The core aspects of Aurora's application that we consulted on, and which we provide further detail on here, include:

### Under the CPP

- the length of the CPP period
- service quality and reliability
- capital expenditure
- operating expenditure
- allowable revenue (and price implications for consumers).

### As part of the wider package

- Accountability and delivery.

Having reviewed Aurora's proposal, and assessed it against the framework and evaluation criteria set out in the rules and legislation that apply to us (which includes considering stakeholder views), we accept that the majority of Aurora's proposed investment is prudent and necessary to fix its network.

While our draft decision would reduce the amount of expenditure Aurora can recover over the next five years, compared to what it proposed, it will still result in substantial price rises for its customers.

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4. [Electricity Authority, "Distribution pricing scorecards 2020" \(23 February 2021\)](#).

## Five-year CPP

Although Aurora requested a three-year CPP period, our analysis of its proposed service quality and expenditure led us to consider that the default five-year period would better promote long term benefits to consumers.

While there may be more uncertainty over Aurora's forecasts in years four and five, we don't consider this requires preferring a three-year CPP. We have put contingency mechanisms in place that manage the risk of setting the revenue too low by providing some flexibility to deal with changes in circumstances which require additional investment.

In our view, a five-year period best meets the purpose of Part 4 of the Act and provides greater certainty to both Aurora and its consumers to plan for the impacts of this investment.

## Service quality and reliability

Power outages and voltage issues are a source of loss for consumers, particularly businesses. Aurora's consumers told us that the quality and reliability of their supply were of significant concern to them. They did not necessarily want to pay more for improved reliability, but they also did not accept it should be allowed to deteriorate further.

Aurora requested we relax the quality standards it is currently subject to under its DPP to better reflect the actual state of its network. In its proposal, it forecast longer and more frequent unplanned outages compared to the 2016-2020 period. It also expected planned outages to increase so that it can undertake network replacement.

While Aurora asked us to amend its unplanned outage targets to more achievable levels, it has not sought a more lenient planned outage standard. This is partly because it expects it can significantly improve how it notifies its consumers of planned outages so that it stays within its current standard.

We have set unplanned outage targets at levels that broadly reflect Aurora's performance over the past four years. These levels are stricter than what Aurora originally proposed but more lenient than currently prevails. Aurora will face the financial penalties if it breaches the standards we set it, and rewards if it outperforms them.

We have accepted its proposal to maintain the standards that it currently faces for planned outages. We are satisfied it reflects the scale of work required to be undertaken on the network, while also incentivising Aurora to improve its notification of outages and minimise cancellations at short notice.

Overall, our decision means that Aurora's consumers can expect the reliability and quality of their electricity supply to stabilise at today's levels, before gradually improving over time.

## Capital expenditure

Capital expenditure is recovered over the life of an asset, which in an electricity lines network typically ranges from 25 to 70 years. Only a proportion of Aurora's capital expenditure will be recoverable during this CPP period, with the full impact becoming clearer when we set its next price path as it is dependent on the timing of investments.

Aurora forecast it would spend \$356.3 million to replace ageing assets and invest in the growth of its network over the coming five years. Its consumers and stakeholders generally accepted that some investment was necessary.

Our final decision is to reduce this forecast expenditure by about \$28.9 million (8.1%). This would allow \$327.4 million of capital expenditure.

**Figure X4 Forecast capital expenditure**

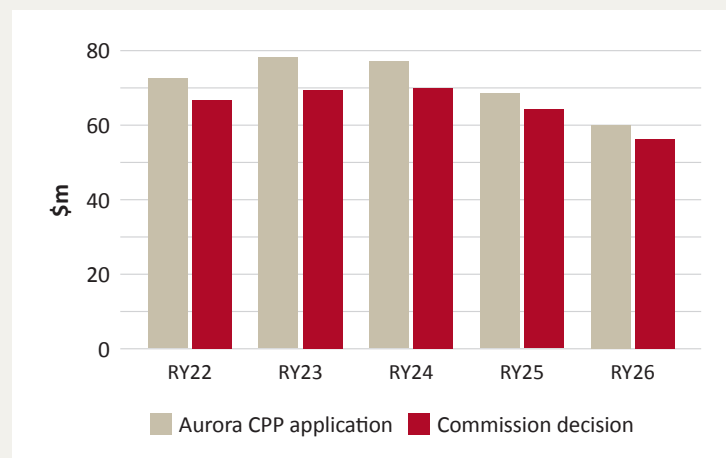


Table X2 below provides a breakdown of the capital expenditure proposed by Aurora compared to our final decision by category.

**Table X2 Capital expenditure breakdown**

Expenditure category	Aurora proposal \$m	Final decision \$m <sup>5</sup>
Asset renewals	281.8	262.9
Network growth and security	30.3	23.8
Other network capex	29.1	25.7
Non-network capex	15.2	15.0
<b>TOTAL</b>	<b>356.3</b>	<b>327.4</b>

5. Excludes capital contributions and any capex associated with Right of Use assets.



Overall, we consider Aurora has largely justified its capital spending proposal. The major reductions we have identified largely relate to the need for Aurora to support a change in investment strategy with business cases, reductions proposed by the Verifier that we agree with, reductions to address forecast modelling issues, and a five percent top-down efficiency adjustment being applied consistently across the expenditure programme.

We have decided to allow more capital spending than was proposed by our draft decision based on additional information we received in Aurora's submission. In particular, we have allowed additional capital expenditure for sub-transmission cables and for increased demand in Arrowtown in light of additional information on failure rates from Aurora.

We have included two reconsideration mechanisms that would allow Aurora flexibility to apply for additional expenditure during the CPP period. Aurora may apply to us to include approval of expenditure for:

- additional work that is dependent on growth on Aurora's network; and
- additional work that may be required due to risks relating to the condition of the network.

We consider these are appropriate safeguards to ensure Aurora has the ability to implement the investment programme should the need for specific work become apparent.

## Operating expenditure

Aurora forecast it would need \$252.9 million of operating expenditure, which would all be recovered from its consumers over the five-year CPP period. It considered this funding would, among other things, primarily enable it to move from a reactive to a proactive maintenance approach and improve its internal capabilities to implement its investment plan.

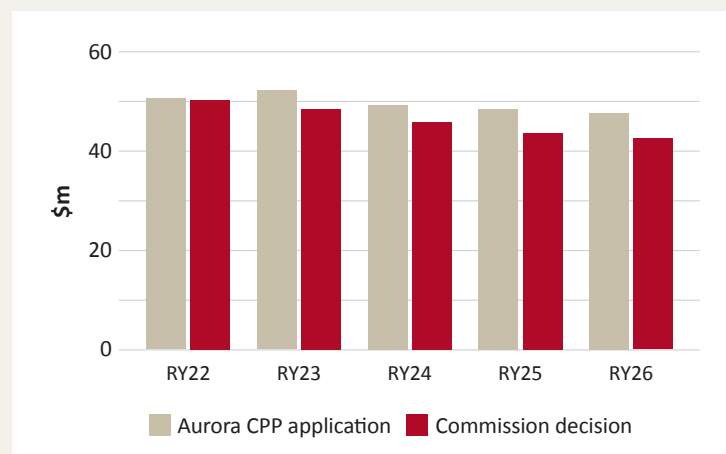
During consultation, stakeholders and consumers highlighted, among other things, staff and executive salaries, vegetation management practices and general capability concerns that they felt could affect Aurora's operating costs.

The Verifier reviewed 91% of Aurora's operating expenditure programme and highlighted some key areas it considered we should investigate further.

Our final decision is to allow Aurora to spend \$236.0 million of the \$252.9 million – a reduction of \$16.9 million or 6.7%.

The final annual operating expenditure allowance compared to what Aurora proposed is shown below.

**Figure X5 Forecast operating expenditure**





The breakdown of this spending is summarised as:

**Table X3 Operating expenditure breakdown**

Expenditure category	Aurora proposal \$m	Final decision \$m <sup>6</sup>
<b>Preventive, Corrective and Reactive Maintenance</b>	70.3	69.7
<b>Vegetation Management</b>	21.2	21.2
<b>System Operations and Network Support (SONS) and People costs</b>	120.7	104.4
<b>IT Opex</b>	17.0	17.0
<b>Premises, Plant and Insurance</b>	5.1	5.1
<b>Governance and Administration</b>	15.6	15.6
<b>DER Upper Clutha</b>	3.0	3.0
<b>TOTAL</b>	252.9	236.0

Our decision to not approve aspects of the proposed operating expenditure reflects the fact that we do not consider all of Aurora's forecast spending was efficient.

We further consider that Aurora should become more efficient over time, which would lead to general cost savings across the CPP period.

The operating expenditure allowance is greater than that proposed by our draft decision. We increased the allowance for vegetation management to the level proposed by Aurora after it provided us with confidential information on unit rates for vegetation management charged by its contractor. Submissions on the draft decision in relation to aspects of Aurora's non-network operating expenditure led us to undertake further analysis on those costs, and on systems operations and network support (SONS) and people costs in particular.

As a result, we have increased the allowance for SONS and people costs as we now accept that Aurora's forecast SONS and people costs for RY22 is justified in the first year of the CPP, given Aurora's need to invest and build capability. We assess that these costs should fall over the next decade as Aurora's costs reduce to a more steady state level which is in line with expenditure levels of comparable EDBs.

6. Excludes operating lease costs

A number of stakeholders raised concerns on some aspects of our draft decision. In particular, suppliers focused on our approach to SONS and people costs where our draft decision had departed from the views of the Verifier, and was informed, in part, by comparative benchmarking. Our evaluation starts with the Verifier's report, but where the expenditure has materially increased – for SONS and people costs it had tripled – and the Verifier raised various matters for us to consider further, then we need to investigate it more. Aurora's expenditure proposal for SONS and people costs did not include detailed business case, or clear evidence of effective challenge (such as independent reviews) so we also looked at comparative benchmarking. Our final decision on SONS and people costs does not rely on the comparative benchmarking analysis, though we have had regard to that when assessing Aurora's proposal.

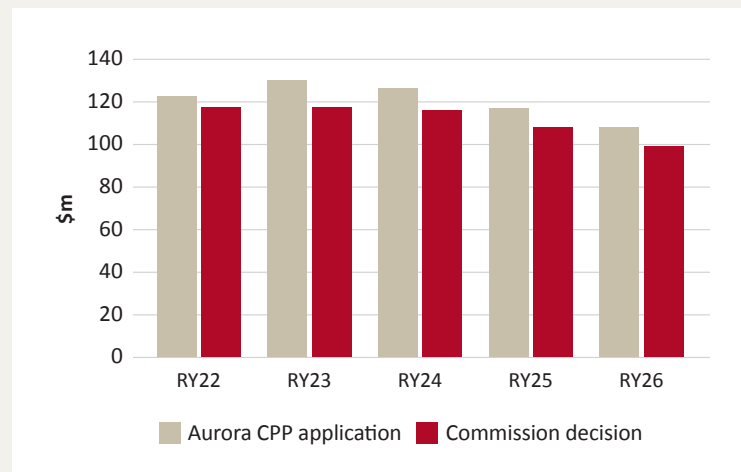
Submitters raised a number of queries about our rules and regulatory processes, and how they are applied. We are open to feedback on how the CPP regime could be improved and the rules and processes that govern price-quality paths. There is an opportunity to do so as part of the upcoming review of Input Methodologies which will begin later in 2021.

## Allowable revenue and price impact for consumers

In total, Aurora proposed to spend \$609.3 million of opex and capex to fix and operate its network over the next five years, which would be recovered through an increase in its allowable revenue.

Our decision has reduced Aurora's expenditure to \$563.4 million over the five-year period. The difference for each year of the CPP period is shown below:

**Figure X6 Aurora's total proposed expenditure**

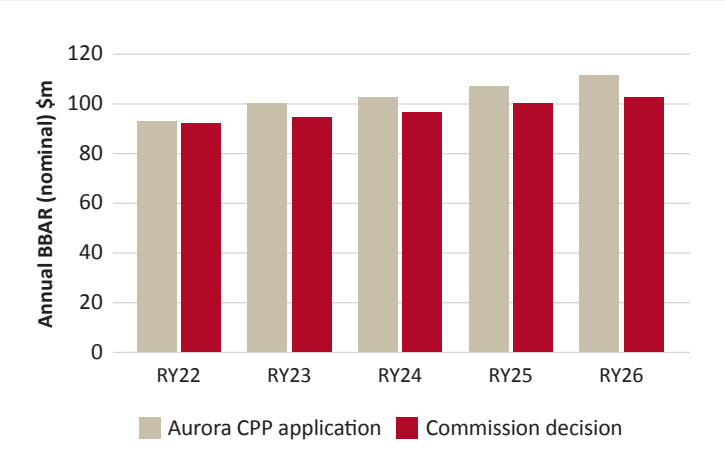


The total line charge revenue that Aurora recovers from its consumers includes three main components:

- revenue to cover opex and capex associated with its distribution network;
- revenue changes relating to regulatory incentive schemes; and
- revenue to recover the costs outside Aurora's control, including transmission charges passed on by Transpower.

A large portion of Aurora’s revenues that we regulate is called the building blocks allowable revenue. This includes various individual costs such as operating expenses, depreciation, tax and allowable return on capital invested in the business. The figure below illustrates how our decision to reduce Aurora’s proposed operating and capital expenditure has reduced the costs it can recover associated with its distribution network.

**Figure X7 Aurora CPP Building Blocks Allowable Revenue: Application vs Commission Decision**



An electricity lines company is incentivised to efficiently outperform (ie, underspend) the expenditure allowances that we set. When the company spends more than is set out in its DPP allowance as Aurora has, the price-quality regulatory regime requires it to absorb some of that extra spend itself. However, to avoid disincentivising the delay of critical work, under the CPP it is entitled to recover the greater part of this additional expenditure from its consumers in future years.

Over the past five years Aurora has spent an estimated \$174 million more than its approved expenditure allowance under the DPP to fix the priority issues it has identified on its network. It did so ahead of our decision on the CPP as it had identified work that needed to be actioned immediately.

Our Input Methodologies allow Aurora to recover approximately \$136 million of this estimated \$174 million overspend.

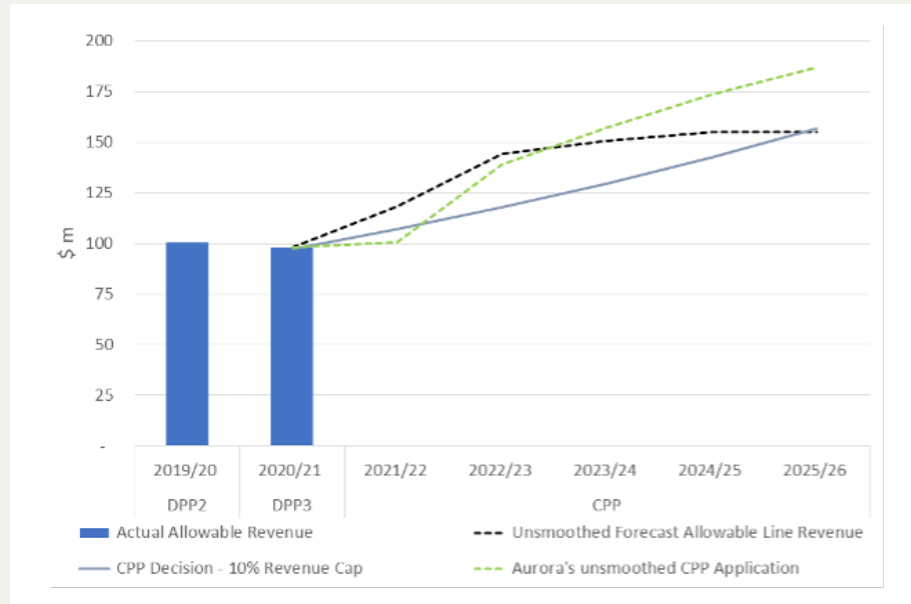
As part of our consultation process, we sought feedback from Aurora’s consumers on options for managing the impact of increased lines charges on their electricity bills. Consumer views were balanced on how to manage the impact, with a slight preference for price rises to be spread over a longer period to reduce the immediate bill shock.

We have decided to cap Aurora’s line charge revenue over the five-year CPP period. Annual increases will be limited to approximately 10% per year plus or minus any changes in the inflation forecasts that were used to set the CPP.

We have also introduced a mechanism to allow Aurora to pass greater than forecast increases in Transpower’s forecast transmission charges through to consumers. This is similar to the approach we adopt for other EDBs under the DPP but the annual adjustment could lead to an annual price increase which is greater than 10%.

The following figure describes Aurora’s allowable revenues, including the effect of capping Aurora’s line charge revenue. Aurora’s proposed allowable revenue is shown in green. The black dashed line shows the impact of our reductions to Aurora’s proposed expenditure. Our 10% revenue cap further reduces Aurora’s revenues in the CPP period, as shown in blue.

**Figure X8 Forecast allowable lines charge revenue \$**



The effect of the revenue cap is a deferring the recovery of some of Aurora’s revenues into the next regulatory period when they will be recovered together with interest. We have forecast that recovery of \$69 million (plus interest) will be pushed to the next five-year regulatory period.

## Price impact on consumers

Aurora’s recovery of this additional revenue to fund this investment plan will impact on the prices charged to consumers. We modelled the likely price impact on consumers arising from Aurora’s CPP and our revenue cap over the next five years. We also had independent experts (Castalia) review our methodology for accuracy.

Aurora’s original estimates of the price increases did not include GST or account for inflation, and so understate the potential impact on consumers. We have adjusted Aurora’s 2023-2024 prices estimates in its proposal to include those additional factors and have provided estimates on how our decision reduces these estimated price impacts, as shown in the table below.

**Table X4 Estimated total monthly bill price increase (\$) as at 2023-2024**

	Dunedin	Central Otago and Wanaka	Queenstown
<b>Aurora CPP proposal adjusted (includes GST and inflation)</b>	32.70	47.30	39.80
<b>Final Decision (includes GST and inflation)</b>	22.20	31.50	22.70
<b>Difference</b>	<b>-10.50</b>	<b>-15.80</b>	<b>-17.10</b>

By using the third year as a snapshot, this table highlights how our decision substantially lowers the potential bill increase faced by consumers compared to Aurora's proposal.

Since making its proposal, Aurora has made some changes to the pricing methodology that determines how costs are allocated across the three network regions. Aurora has indicated it intends to consult on potentially more substantial changes to the way it allocates costs across the regions on its network later in the CPP period. We support any moves by Aurora to make its pricing more cost reflective.

Aurora has already announced the line charges increases that come into effect from 1 April 2021. It has estimated that the monthly price increase on the standard residential household will be \$4.94 in Dunedin, \$9.19 in Central Otago, and \$6.20 in Queenstown Lakes. These prices reflect the initial changes in Aurora's regional pricing methodology.

Below we provide some estimates of future line charges or increases in future line charges. These do not take into account Aurora's most recent or potential further changes to Aurora's regional pricing methodology.

Using currently available information, we estimate the increase in monthly lines charges for medium residential electricity users in Regulatory Year 2026 to be \$32.40 in Dunedin, \$51.30 in Central Otago, and \$33.00 in Queenstown Lakes. The progression of line charge increases over the course of the five-year CPP period is outlined in Figure X5 below.<sup>7</sup>

**Table X5 Estimate of increase in residential monthly lines component relative to RY21 – Medium Consumer Profile<sup>8</sup>**

	RY22	RY23	RY24	RY25	RY26
<b>Dunedin</b>	\$4.70	\$11.60	\$18.10	<b>\$24.90</b>	<b>\$32.40</b>
<b>Central Otago</b>	\$9.40	\$17.50	\$27.50	<b>\$39.10</b>	<b>\$51.30</b>
<b>Queenstown</b>	\$7.10	\$10.80	\$17.40	<b>\$24.80</b>	<b>\$33.00</b>

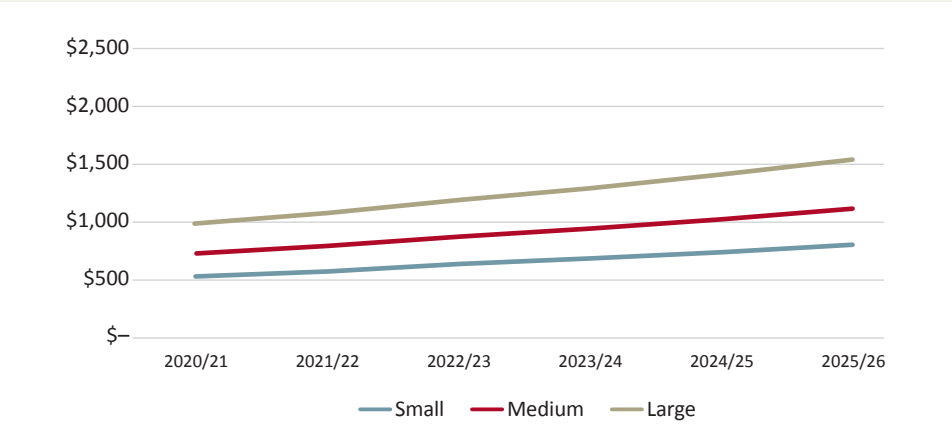
It is important to note that it is difficult for the Commission to provide accurate long-term estimates of the particular price increases for specific consumers or groups of consumers that result from Aurora's CPP. There are a number of factors that impact future prices (including any changes Aurora makes to its regional pricing method) which make it inappropriate to rely solely on the above figures. Ultimately, Aurora is responsible for, and in the best position to provide estimates of the price impact of its investment plan to its consumers.

7. Aurora's definition of a standard residential household is one which uses 9,000 kilowatt hours per year. The Commissions price estimates are based on the median usage of a residential consumer in each of Aurora's regions and are broadly comparable.

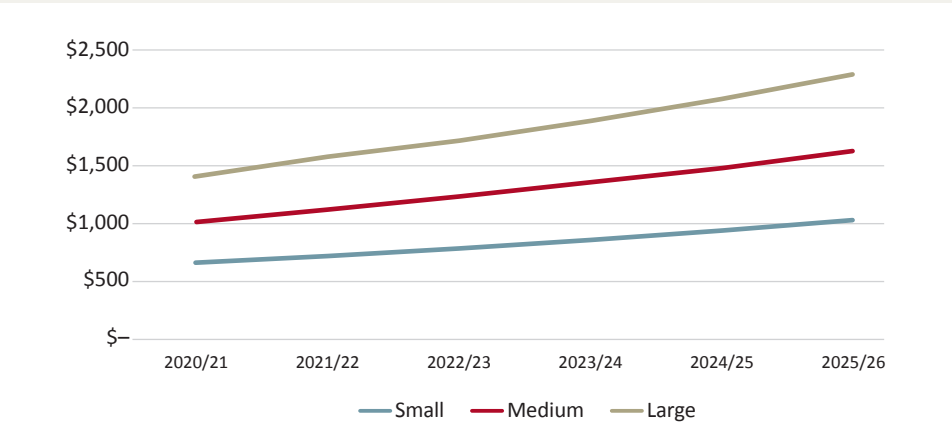
8. The numbers presented for RY24 differ from those in Table X4, as those numbers refer to the total monthly bill price increase.

The following graphs show the estimated average prices in dollar terms for low, medium and high residential electricity users for each of Dunedin, Central Otago and Wanaka, and Queenstown Lakes for the five years of the CPP when compared to Regulatory Year 2021. These are estimates of the lines (distribution and transmission) charges alone.

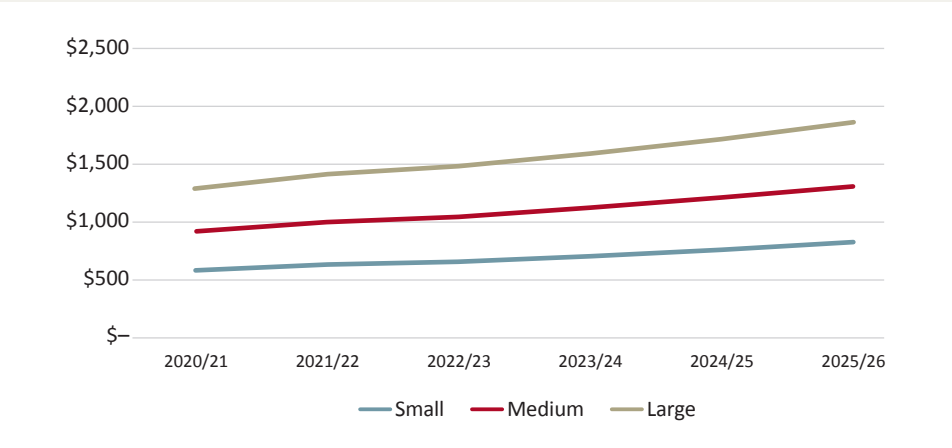
**Figure X9 Dunedin Residential Annual Lines Charges**



**Figure X10 Central Otago Residential Annual Lines Charges**



**Figure X11 Queenstown Residential Annual Lines Charges**



## Accountability and delivery

A recurring theme from our engagement with Aurora's consumers, and feedback received during public meetings, was the lack of trust and confidence they had in Aurora's ability and commitment to deliver what it says it will. Aurora itself has acknowledged it has work to do to restore faith in its business and improve how it communicates with its communities.

With a work programme of this scale, a key risk is that priority maintenance and asset replacement is not undertaken quickly enough, which could affect the quality of supply for consumers. Aurora has already taken steps to mitigate this risk and improve its ability to deliver, which are detailed in its CPP proposal and backed-up by the Verifier's report.

Our focus has turned to how we can ensure Aurora reports on how it is delivering against its plan and improving performance in the longer term.

The CPP does provide for accountability at some level. However to ensure the Commission, consumers and other interested parties have the information needed to assess its progress and performance over time, we have proposed a series of additional information disclosure measures to improve Aurora's accountability. We have released our draft decision on these alongside the CPP decision.

The objective of these measures is to allow interested persons to assess the extent to which:

- Aurora completes the necessary work on its network and applies for approval of expenditure for additional work if this is required;
- Aurora's spend on the required work is right-sized, it is incentivised to complete its work efficiently and it continues to work on cost efficiencies;
- Aurora delivers on the planned work it has committed to;
- Aurora improves transparency and responsiveness towards consumers; and
- Aurora enables its consumers to better understand the impact of its CPP on prices across its regions.

The proposed measures would require Aurora to:

- Produce an Annual Delivery Report which will compare what it has delivered against what it said it would deliver, and present a summary of the report to consumers in each of Aurora's three regions;
- Disclose information annually on the quality of services (including reporting by Aurora on its voltage quality monitoring practices on its LV network), regional pricing and improvements in asset management, project quality assurance, data collection and quality, and cost estimation processes; and
- Procure a report (during Year 3 of the CPP period) from an independent expert (or experts) that provides an opinion on Aurora's performance in some of the more complex areas of the above requirements to ensure that we, and other interested persons across its network, can effectively conduct our own assessments of Aurora's performance.

Aurora also has an existing consumer charter and compensation scheme and plans to consult on potential improvements. We support the existence of these initiatives and think they can improve the relationship between lines companies and their consumers.

We are proposing to require Aurora to publicly report on its performance against the existing commitments in its consumer charter and whether (and if so how) it has consulted with its consumers on changes to its charter commitments and compensation scheme. We also propose to require Aurora to disclose whether (and if so how) Aurora has improved its consumers awareness of the charter and scheme.

We have published a draft Information Disclosure reasons paper explaining these proposals in further detail. This paper, and the draft determination, can be found on our website.<sup>9</sup>

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9. <https://comcom.govt.nz/regulated-industries/electricity-lines/projects/our-assessment-of-aurora-energys-investment-plan>

