The impact of economic regulation on Aurora's lines charging and investment

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1 July 2024

Brief

We have been asked to address three issues that were raised during DCC's consultation on the possible sale of Aurora Energy:

1. What is the scope for Aurora to **raise lines prices** across the network, or **rebalance lines charges** amongst consumer groups or **defer maintenance** to save cost or **underinvest** under the current regulatory framework? If there is scope, would a different owner take advantage of that latitude?

2. How enduring is the **regulatory framework** in Part 4 of the Commerce Act?

3. What is the likelihood that the community would be better off or worse off **if Aurora was owned by a party other than DCC/DCHL**?

Question 1

What is the scope for Aurora to **raise lines prices** across the network, or **rebalance lines charges** amongst consumer groups or **defer maintenance** to save cost or **underinvest** under the current regulatory framework?

- There is no scope for Aurora to raise lines charges beyond what is allowed by the Commerce Commission (ComCom) under part 4 of the Commerce Act.
- The scope for Aurora to rebalance lines charges amongst consumer groups is confined to a judgement on the allocation of costs between consumer groups.
- The scope to defer maintenance or underinvest is limited by the transparency of the information disclosure requirements, director liability under Schedule 17 of the information disclosure requirements, the reputational risk of failures on the network and the risk of a fine which would have to come out of NPAT.

The regulatory framework

- The Commerce Commission protects against extraction of monopoly rents by lines businesses. This is achieved through the application of regulations governing price and quality under Part 4 of the Commerce Act. These regulations aim to ensure consumer interests are promoted regardless of ownership.
- The Electricity Authority's distribution pricing principles and active reform programme protect against cross subsidy of lines charges between consumer groups. This is consistent with the reliability and economic efficiency limbs of their statutory objective.

Default Price Path

Electricity distribution businesses have been subject to a **default price-quality path** (DPP) since 2009.

Price path is shorthand for maximum allowed prices <u>and</u> minimum service standards The main components of a DPP are:

- the maximum prices & revenues allowed at the start of the regulatory period
- the annual maximum rate at which prices can increase – this is expressed in the form of 'CPI-X', i.e. prices can increase by the rate of inflation less a prescribed percent or 'X-factor'.
- the minimum service quality standards that must be met.

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Customised Price Path (CPP)

- EDBs may apply to the Commission for a **customised price-quality path** that better reflects their specific circumstances.
- Under a CPP the regulator approves bespoke allowances for what an electricity network business can invest, the consequential charge to its customers, and minimum service levels over a specified period.
- In 2020 Aurora applied for a CPP. Their AMP supporting the application focused on additional investment required to reduce risk and improve network safety and reliability following years of under investment and under maintenance. The CPP, which runs from 2021 to 2026, gives Aurora the ability to recover additional costs through line charges for the purposes of fixing, upgrading and maintaining its network.

Service Quality standards

- Quality and reliability standards set by the Commission reduce the risk that EDBs seek to increase profits by cutting costs and compromising quality.
- In December 2016, DCHL commissioned a report on the state of the network from Deloitte who found:

  An under investment on asset inspections/condition monitoring, planned maintenance and asset replacement over the last 25 – 30 years

- This is the root cause of where Aurora finds itself today. The current board and management are in the process delivering a compliant network
- The regulatory framework has evolved such that a decline in quality standards would be picked up more quickly, and the consequences felt more quickly, than was the case in 2016

Price quality regulation starts with a revenue cap

EDBs can recover what the ComCom consider are efficient costs to deliver the required quality by way of a revenue cap.

Allowable costs becomes allowable revenue over each regulatory period. Projected revenue is smoothed by the rate at which prices are allowed to increase to create a maximum allowable revenue across the DPP or CPP period

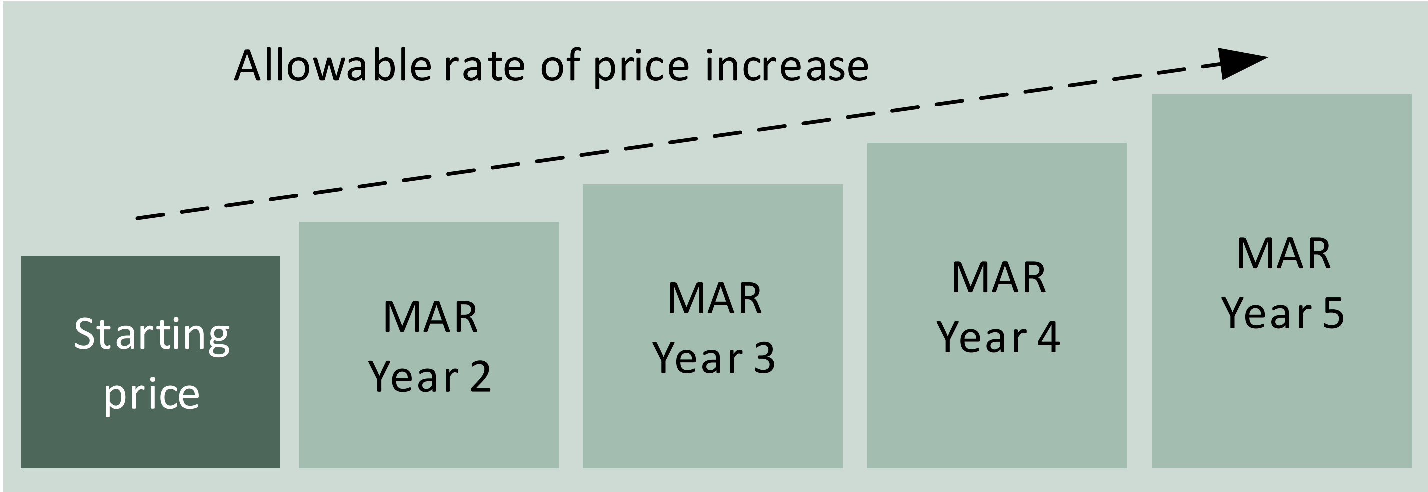
This mechanism and the quality standards operate together to incentivise EDBs to manage costs efficiently and guard against possible incentives to reduce costs and maximise profits simply by lowering service quality.

The application of the revenue cap is illustrated in the following slide.

Application of the revenue cap

Converting Building Blocks Allowable Revenue (BBAR) to Maximum Allowable Revenue (MAR):

Projected annual BBAR including regulated return on capital



What is reported in Aurora's annual financial statments:

MAR a.k.a. Operating Revenue

less OPEX
= EBITDA

less Depreciation & Interest
= EBT

less Taxes
= NPAT a.k.a. Net Income or Profit

Choices:
Paydown debt
Reinvest
Pay dividends

Deferred revenue

- Deferred revenue (deferred to reduce the price impact on consumers) is the deferred recovery of efficient costs that have been allowed by the Commerce Commission when the MAR is calculated.
- The need to provide for some revenue deferral to accommodate the rate at which revenue could be recovered was well documented in the Commerce Commission's 2021 final decision on Aurora Energy's proposal for a CPP.
- Aurora accounts for deferred revenue in their financial management. Aurora annual report notes to the financial statements note 3:*

  The Commerce Commission's Customised Price-Quality Path Determination for Aurora Energy included a 10% limit on the annual increase in line charge revenue in order to reduce the price impact on consumers. Combined with the impact of volume driven revenue variances the total deferred revenue for year ended 31 March 2023 is $39.315 million (2022: $13.417 million). This deferred revenue will be recovered from consumers in future financial years.

* Aurora Annual Report 2023

Aurora pricing approach

The Electricity Authority has a framework for EDB pricing methodologies aimed at ensuring that one group of consumers does not subsidise another. Aurora's pricing methodology reflects those requirements. To illustrate, Aurora allocates its lines charges amongst consumer groups as follows:

Calculate target revenue (per DPP or CPP)	**Allocate to pricing areas**	**Allocate to customer load groups**	**Set cost-reflective variable targets**	**Set non-distortionary fixed tariffs**
based on Commerce Commission	based on underlying costs of supply	based on service characteristics	based on long run marginal costs	based on allocation of residual revenue
Determine how much revenue Aurora can collect	How much Aurora collects from each sub network	How much Aurora collects from each consumer group	Calculate unit prices that deliver the target revenue	Test for cross subsidy i.e. are prices "fair"?

Summary: Key implications for consumers

1. Revenue recoverable through lines charges is capped by the ComCom and the regulations apply to all (non-exempt) EDB owners.
2. Lines charges cannot be increased more than allowed by ComCom.
3. Deferred revenue is a function of smoothing prices through time which, in turn, constrains MAR in any year. What is deferred is the ability to recover allowable costs. The nature of the owner of the EDB has no bearing on this.
4. Aurora's allocation of lines charges amongst consumer groups is transparent and consistent with EA guidelines and oversight. There is minimal scope for cross subsidisation between consumer groups.
5. Service quality standards are factored into the allowances included in BBAR and, therefore, MAR. The AMP content, ID regime and director signoff of the AMP are an integral part of the quality part of the regulatory framework.
6. Consumers' exposure to price and quality for lines services are protected whoever the owner of the EDB is.

Question 2

How enduring is the **regulatory framework** in Part 4 of the Commerce Act?

- The stated aim of Part 4 of the Commerce Act is **to promote outcomes consistent with those produced by competitive markets**, including providing incentives to invest, innovate and make efficiency gains, while requiring suppliers to share gains with consumers and to limit excessive profits.

- It is hard to see the circumstances whereby the fundamental premise of the stated aim is undermined by a future government.

How stable is the regulatory framework

- The purpose of the Commerce Act is to promote competition in markets for the long-term benefit of consumers within New Zealand. (s1A)
- The Act establishes the independent Commerce Commission which plays a role in ensuring New Zealand's markets are competitive, consumers interests protected, and sectors with little or no competition are appropriately regulated.
- The Electricity Authority's statutory objective requires it to deliver competition, reliability and economic efficiency for the long term interest of consumers
- Softening the promotion of competition in markets or regulation of sectors with little or no competition would be a major shift in government policy. The framework has been improved over time but has not been redirected in any way by successive governments to date.

Question 3

What is the likelihood that the community would be better off or worse off **if Aurora was owned by a party other than DCC/DCHL**?

- Consumers are well protected by the regulatory regime and that protection is not owner dependent.
- Every EDB in New Zealand faces the challenges of the high investment required to accommodate electrification which is, in turn, a consequence of New Zealand's legislated decarbonisation goal
- In addition Aurora is dealing with fixing, upgrading and maintaining its network after years of under maintenance and under investment.
- Aurora's owner will have to be more resilient and far sighted than would normally the case and consumers could be better off with another party if DCC/DCHL doesn't have the resilience required to get through the coming years.

Attributes for EDB owners under price quality regulation with the decarbonisation challenge

The transition to a low carbon economy means significant growth in electrification and a lot of uncertainties. Over this period some of the attributes the ideal owner of a regulated EDB might need are:

1. Long term investment horizons allowing a flexible dividend policy
2. Able to deal with uncertainty and risk
3. Access to capital, specifically cost-effective debt
4. Comfortable with debt to equity ratios that are consistent with ComCom's regulated WACC over each regulatory period
5. Experience with regulated businesses
6. Economies of scale
7. Synergies with other similar businesses esp. other regulated network businesses
8. Understanding the challenges facing EDBs with decarbonisation.