Response to the Commerce Commission's invitation to comment on Aurora Energy's proposed new Customised Price-Quantity Path

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Aurora Energy Ltd wants the Commerce Commission to allow it to add \$356 million of new investment to its existing (as of March 2019) \$447 million Regulatory Asset Base (RAB), and to hike its prices to consumers accordingly. Consumers are absolutely right to feel aggrieved.

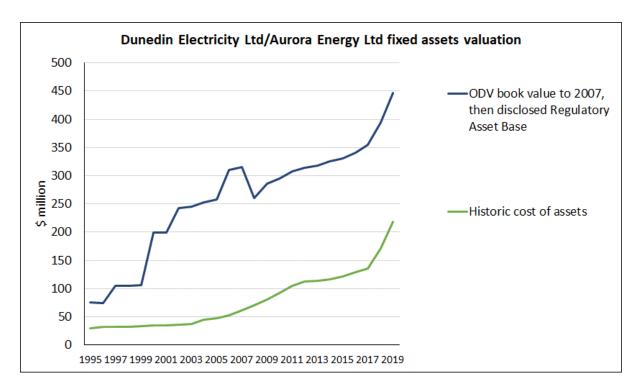
The RAB is the core of the Commission's building-blocks approach to price regulation. It is the capital sum on which the company is allowed to collect (and consumers are forced to pay for) both depreciation charges, and a commercial rate of return, via the allowed operating surplus (\$21.239 million in the 2019 Information Disclosure accounts Schedule 3(i)¹. Adding another \$356 million to the RAB will mean, the Commission estimates, an increase of between 48% and 66% in the lines charges paid by consumers. The "Key Issues Paper" for consumers makes clear that in the Commission's mind the only real issue is whether this pain for consumers is to be inflicted now or later.

The Commission routinely refuses to engage in any justification of its RAB valuations of lines companies, beyond stating that it has drawn a arbitrary "line in the sand". This admittedly provides a handy defence against unrelenting pressure from big electricity distribution monopolies to be allowed to write up their RABs and raise their permitted profits accordingly. But it also pre-empts legitimate questions from consumers about how the asset valuations came to be so high. Information disclosure was originally introduced, and continues to be promoted, as a means of enabling the public to judge the industry's performance. So it's always worth checking out what the disclosed information shows.

Aurora currently (as of the last disclosure accounts, dated March 2019) operates a set of assets which are valued for regulatory purposes at \$447 million², compared with a historic cost of \$218 million. My history of the two asset valuations since the beginning of "information disclosure" in 1995 is summarised in the chart below (for anyone interested the calculations are in Appendix 1).

The 2019 Annual Report produced for the company's shareholders shows a loss largely due to relatedparty borrowing from Dunedin City Treasury Ltd, an arrangement which both minimises tax and can be weaponised as an argument against any asset write-down.

Aurora's 2019 Annual Report p.65 note 24 values the fixed assets over \$100 million higher, at \$557 million, reflecting the failure in practice of New Zealand's regulatory regime to restrict monopolists' commercial returns to the notional regulated level.



Roughly speaking³, with an RAB still set at twice historic cost (down from three times historic cost at the commencement of "regulation" in 2008) the capital charges allowed by the Commission have been double what would have been allowed had the Commission not, in 2002, decided to drop consumers' interests overboard and rubber-stamp the "optimised deprival valuations" of assets established under conditions of unregulated monopoly during the second half of the 1990s⁴.

It would be nice if the Commission simply ordered Aurora to take a write-down on its asset base to bring it back to historic cost – or (ideally) quite a bit lower. (There is a strong argument that having allowed the condition of its fixed assets to run down to the point where basic performance standards could not be met, Aurora has sacrificed any moral right to continue to collect rents on even the historic cost of existing assets at the same time as it seeks to load its customers with the full cost of restoring the system to a fit state.)

A large write-down would appear to be possible under sections 53.V.2(a) and 53.M.2(a) of the Commerce Act 1986. Section 53.V.2(a) says

- (2) To avoid doubt, and without limitation, in determining a customised pricequality path that complies with section 53M the Commission may ...
 - (a) set a price-quality path that is lower, or otherwise less favourable to the regulated supplier, than the default price-quality path that would otherwise apply.

My historic cost estimate does not include any revaluations and hence would necessarilyhave to be be multiplied by an inflation-adjusted rate of return in a standard building-blocks model, whereas the Commission's model incorporates inflation via asset revaluations.

That story is told in in Geoff Bertram and Dan Twaddle, 'Price-cost margins and profit rates in New Zealand electricity distribution networks since 1994: the cost of light handed regulation', *Journal of Regulatory Economics*, 27, 3 (2005), pp. 281-307.

Section 53.M.2(a) says

- (2) A price-quality path may include incentives for an individual supplier to maintain or improve its quality of supply, and those incentives may include (without limitation) any of the following:
 - (a) penalties by way of a reduction in the supplier's maximum prices or revenues based on whether, or by what amount, the supplier fails to meet the required quality standards.

Aurora has copped a one-off \$5 million fine for its quality breaches. That is less than the annual excess impost on its consumers of the inflated asset valuation, and barely qualifies as even a wet bus ticket.

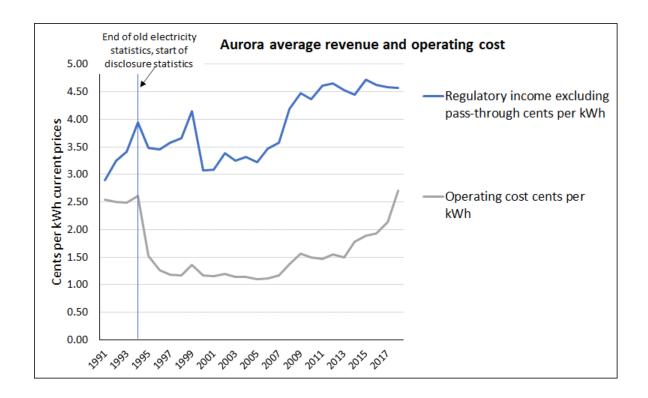
Aurora's request for yet another price increase, in short, opens the way for two long-overdue developments: a write-down – whether forced or negotiated - of the valuation ascribed to that company's existing asset base, and abandonment by the Commerce Commission of its "line in the sand" (more accurately head-in-the-sand) position on network asset valuations in general.

It needs to be recalled that the regulatory asset values were originally set on the basis of the long-discredited method of "Optimised Deprival Value" (ODV), which was supposedly the cost of completely replacing the entire network with another one providing the same level of service. It was on this basis that Commerce Commission staff told the High Court in 2012 that they "considered that an ODV approach mimics outcomes in competitive markets"⁵. If indeed the cost of fixing Aurora's network is the thick end of \$400 million, it's worth asking whether a completely new provider might be able to fix Aurora's network, or build a bypass (replacement) network in one or both of the regions currently served by Aurora, for less. The case for maintaining Aurora's secure monopoly position, rather than putting the entire service out to open tender, does not seem to have been considered at this point. (Having Farrier Swiers review Aurora's investment plan is a weak substitute for such a process.)

It may be worth briefly recalling one other central feature of the deregulated monopoly era of the 1990s, a feature that was common across all electricity lines businesses. The 1992 Energy Companies Act was premised on the view that profit-oriented management would cut costs while not sacrificing quality, and that the lower costs would be passed through to consumers. In practice, as was widely predicted, costs were cut but prices rose in the absence of either competitive of regulatory restraint. In Aurora's case this typical pattern is seen in the chart below⁶, which combines data for the Central Electric and Dunedin Electricity networks up to 1999. The cost cutting in Dunedin during the 1990s clearly included a good deal of maintenance deferral which has contributed directly to the current situation. The widened margin between revenue and operating cost marks the 1994-95 transition from public service to profit-seeking monopoly.

Wellington International Airport and Ors v Commerce Commission, [2013] NZHC 3289 at para 428.

The switch between 1994 and 1995 from the former Electricity Statistics to the gazetted Information Disclosure statistics means that the cost data are not strictly comparable, but this does not fully account for the drop seen in the chart.



Appendix 1: Evolution of the asset valuation

In June 1993 the fixed assets of Dunedin Electricity Ltd (from which Waipori Generation Ltd had by then been separated) had a historic cost valuation of \$17.944 million, of which \$12.846 was the historic cost valuation of the actual network assets.⁷

In April-May 1993 the assets were revalued by Southpac as part of a general revaluation of Dunedin City Council's utility interests, which were to be transferred to a new company, Dunedin City Holdings, in order to enable the Council to borrow against their valuation to extract a cash sum of \$40 million to fund other projects⁸. By March 1995 the fixed assets of the reticulation business were carried on the company's books at \$55.486 million⁹, of which \$42.518 million represented revaluations undertaken prior to that date and the remaining \$12.968 million was historic cost at that point.

Following a further revaluation in 1996, by March 1999 the book value disclosed for Dunedin Electricity's fixed assets was \$75.3 million, with the network assets comprising \$71.4 million of this¹⁰. The revaluation reserve stood at \$69.47 million¹¹, leaving just \$5.83 million of historic cost.

Dunedin Electricity Ltd 1993 Annual Report p.17 note 9 to the financial statements. Ministry of Commerce, Annual statistics in relation to the electric power industry in New Zealand for the year ended March 31 1993, p.25 Table 2 shows a similar value of \$17.7 million for "capital expenditure less depreciation" at March 31 1993 (excluding the generation assets of Waipori Power Ltd).

⁸ Chris Hutching, "Dunedin eyes assets worth \$170 million", *National Business Review* 2 April 1993 p.8.

⁹ Disclosure data in *New Zealand Gazette*.

New Zealand Gazette Issue 122, 5 September 2000, p.3071 note 5.

New Zealand Gazette Issue 122, 5 September 2000, p.3070 note 2.

These figures indicate that the Dunedin City Council was sweating the real network assets¹², while hiking prices to consumers in order to recover a commercial return on an increased (revalued) asset base. All trace of a genuine fair return "on and of" the amount actually originally spent to construct the system was long gone.

The next step in inflating the asset base came on 1 April 1999 when Dunedin Electricity purchased the network assets of Central Electric for \$121.5 million¹³ to create what became the present Aurora Energy business. The historic cost of Central Electric's fixed assets at the time of their sale to Dunedin Electricity was \$30.663 million ¹⁴, including roughly \$2.5 million worth of meters and relays (which were sold separately to Dunedin subsidiary Delta and did not become part of the Aurora asset base). Excluding meters and relays, the historic cost of the Central Electric network assets was therefore \$28.1 million.

The total historic cost of the two sets of fixed assets at March 31 1999 was thus Dunedin's \$5.8 million plus Central Electric's \$28.1 million = \$33.9 million. The ODV valuation of the Central Electric network at November 1998, prepared by Catherall Taylor, was \$64.7 million¹⁵.

Having thus paid 4.4 times historic cost, and nearly twice ODV, for the Central Electric assets, Dunedin Electricity entered them into its asset register "at cost or valuation" thereafter treating the purchase price as if it were historic cost, and making no change to its asset revaluation reserve which continued to show only the accumulated revaluations of the Dunedin network assets.

Starting from the March 1999 historic cost figure of \$33.9 million, the subsequent historic cost of the company's fixed assets can be calculated on a rolling basis from 2000 through 2019 by adding on each year's outlay on fixed assets (net of asset disposals) and subtracting the annual depreciation allowance. The annual change in the resulting historic-cost asset base will then reflect the amount by which new investment exceeds claimed depreciation. The calculation is shown in Table 1 below. With the exception of the \$33.9 million starting value at March 1999, all data were reported under the Information Disclosure Regulations

Financial disclosures published in the *New Zealand Gazette* for the years 1995-1999 show depreciation allowances running well in excess of cash spending on new assets. The annual accounts for Dunedin Electricity for the four years 1995-1998 show depreciation totalling \$14.594 million compared with cash outlays on fixed assets of just \$9.464 million. The fall in historic cost from \$13 million in 1995 to \$5.8 million in 1999, is thus due largely to the excess of depreciation over new investment.

Dunedin Electricity Ltd 1999 Annual Report p.4 stated the purchase price as \$114 million; Central Electric Ltd, 1999 Annual Report p.3 gave a figure of \$127.1 million. The cashflow statement in Dunedin Electricity Ltd 2000 Annual Report p.18 indicates \$122.6 million spent on acquisition of fixed assets by the parent company and \$127.1 million by the "group" – the latter an amount which included the meters purchased for subsidiary Delta. That \$122.6 million further includes somewhat under \$0.8 million purchase of new fixed assets for the Dunedin network [estimated from the cashflow statement in New Zealand Gazette No 122, 5 September 2000, p.3069] as well as the purchase of the Central Electric assets. This would bring the estimated purchase price of the network down to \$121.5 million.

¹⁴ Central Electric's 1999 financial disclosures in the *Gazette*.

¹⁵ Central Electric Ltd, *1999 Annual Report* p.9.

Dunedin Electricity Ltd 1999 Annual Report p.28 note 8.

Dunedin Electricity Ltd 1999 Annual Report p.26 note 4.

for March years and published in the *Gazette* up to 2008 and in company disclosures to the Commerce Commission since then.

Table 1: Fixed assets of Dunedin Electricity Ltd/Aurora Energy Ltd since 2000: historic cost versus regulatory asset base: \$million

	(1) New fixed asset purchases, March year	(2) Disposals of fixed assets, March year	(3) Depreciation, March year	(4) Net investment, March year (1)-(2)-(3)	(5) Historic cost at March rolled forward using disclosure data	(6) Disclosed book value of total fixed assets
1999					33.9	103.4
2000	6.4	0.0	6.3	0.1	34.0	198.7
2001	6.5	0.0	6.3	0.2	34.2	198.9
2002	9.2	0.0	8.0	1.2	35.5	242.4
2003	11.1	0.0	8.8	2.2	37.7	245.5
2004	17.5	0.1	9.7	7.7	45.3	253.0
2005	12.3	0.1	9.6	2.6	47.9	257.2
2006	13.6	0.0	9.6	4.0	51.9	309.8
2007	19.2	0.0	10.2	8.9	60.9	315.6
2008	16.7	0.4	7.2	9.0	69.9	259.8
2009	18.1	0.4	7.7	10.1	80.0	285.6
2010	20.8	0.5	8.2	12.2	92.2	294.6
2011	21.2	0.4	8.5	12.3	104.4	307.6
2012	18.2	1.0	9.7	7.6	112.0	313.8
2013	12.9	0.0	11.1	1.8	113.8	318.3
2014	13.4	0.1	11.5	1.8	115.6	325.0
2015	17.3	0.0	11.9	5.4	121.0	330.9
2016	20.4	0.0	12.3	8.1	129.1	341.0
2017	18.6	0.0	12.8	5.8	134.9	354.2
2018	50.3	0.6	13.5	36.2	171.1	394.2
2019	63.0	0.9	15.1	47.1	218.2	447.1