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SUBMISSION IN RESPONSE TO FIRST REPORT OF THE REVIEW PANEL: DISTRIBUTORS' PROFITS

1. My name is Ivo Geoffrey Bertram. I hold a doctorate in Economics from the University of Oxford. Since retiring from the School of Economics and Finance at Victoria University of Wellington in 2009 I have been a Senior Associate at the University's Institute for Governance and Policy Studies (formerly the Institute for Policy Studies).
2. Over the past four decades I have published extensively on the economics of the New Zealand electricity industry, including two detailed analyses of the history of industry changes since the mid-1980s¹. I have made submissions to previous inquiries into the question of excess profits and asset valuation². In 2006 I and a colleague, using data published under the Electricity (Information Disclosure) Regulations 1994, published a peer-reviewed paper in a leading international journal on the subject of excess profits and asset valuation in New Zealand's electricity distribution sector³. Our results were replicated and confirmed by a later, also peer-reviewed, overseas study based on the same data⁴.

¹ "Restructuring of the New Zealand Electricity Sector, 1984-2005", in *International experience in restructured electricity markets: What works, what does not, and why?*, edited by F.P. Sioshansi and W. Pfaffenberger, Amsterdam: Elsevier, 2006, chapter 7, pp. 203-234; and "Weak regulation, rising margins, and asset valuations: New Zealand's failing experiment in electricity reform", Chapter 21 in F.P. Sioshansi (ed) *Evolution of Global Electricity Markets: New Paradigms, New Challenges, New Approaches*, Amsterdam: Elsevier Academic Press, 2013. Both these are available from me on request and can be accessed on my website, www.geoffbertram.com.

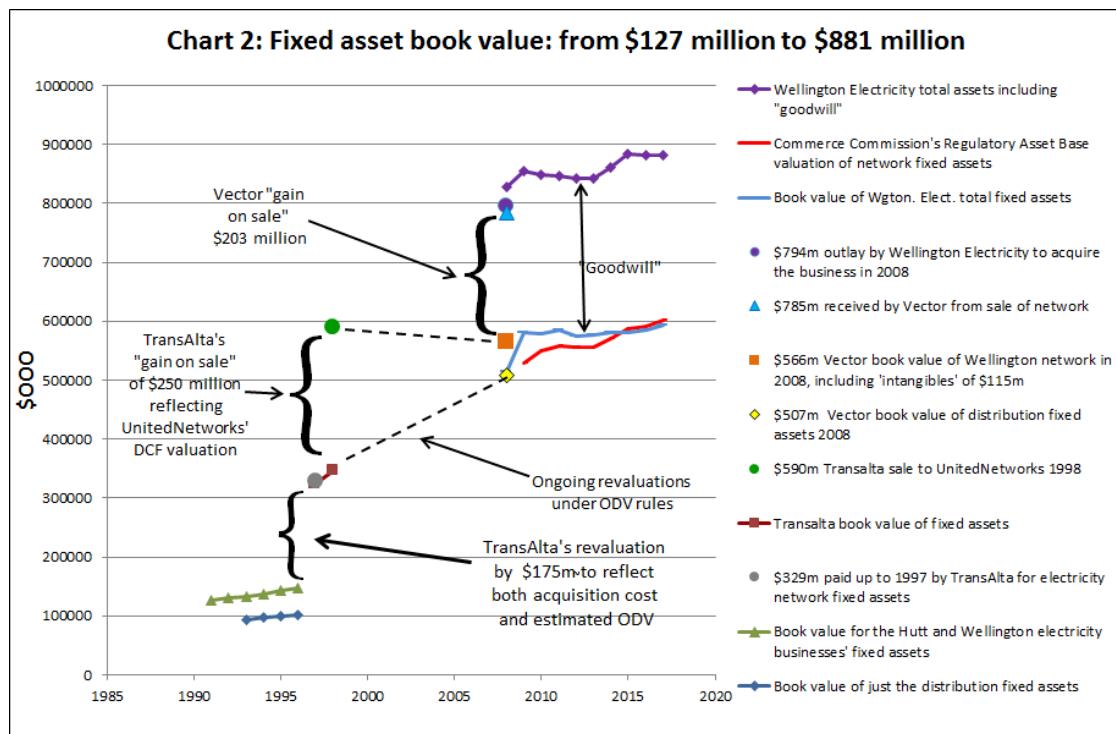
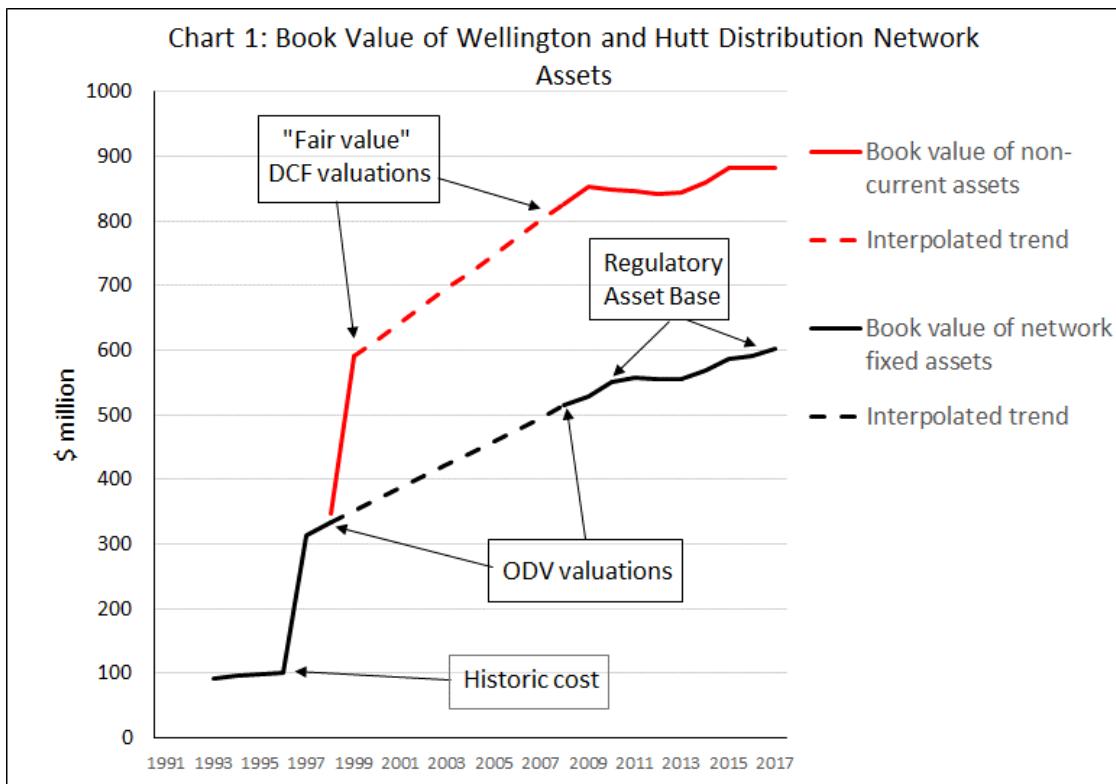
² In particular see Geoff Bertram and Simon Terry *Lining Up the Charges: Electricity Line Charges and ODV*. Simon Terry Associates, July 2000, http://www.geoffbertram.com/fileadmin/publications/Lining_Up_the_Charges.pdf ; and our Submission and Supplementary Submission to the Commerce Commission "Review of Asset Valuation Methodologies: Electricity Lines Businesses", 2002, at http://www.geoffbertram.com/fileadmin/publications/Submission_on_lines_valuation.pdf and http://www.geoffbertram.com/fileadmin/publications/Supplementary_submission_on_Lines_valuation_methodologies.pdf .

³ 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.

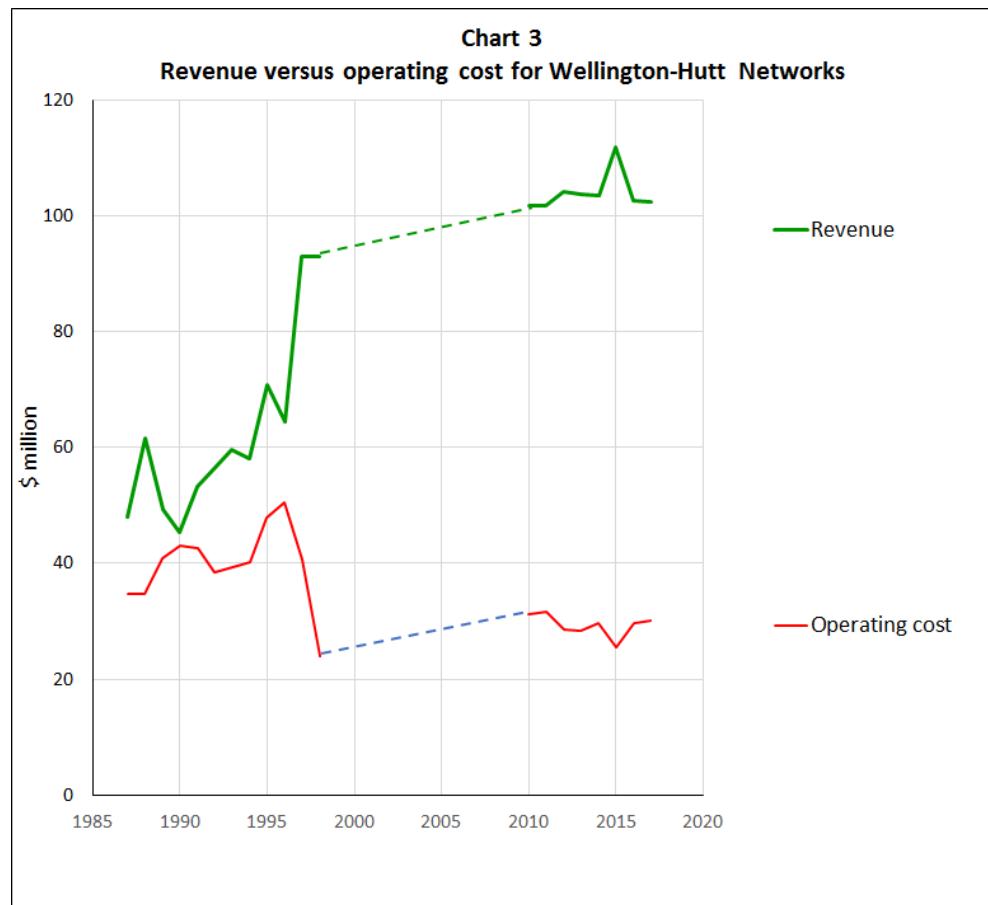
⁴ Paul H. L. Nillesen and Michael G. Pollitt, "Ownership Unbundling in Electricity Distribution: Empirical Evidence from New Zealand", *Review of Industrial Organization* (2011) 38:61-93.

3. This initial submission is made in response to the following sections of the Electricity Price Review First Report (referred to hereafter as 'the Report'):
 - The distressing, but not untypical, case study of an elderly Porirua couple on page 14;
 - Figure 6 on page 20;
 - The fourth paragraph on page 48, beginning "Finally, some stakeholders";
 - The section on "distributors' profits" on pages 53-55;
 - The paragraph at the bottom of page 5 stating that "We found nothing to suggest grid operator Transpower or distributors are making excessive profits"; and
 - The claim on page 8 that the Panel has "carried out a comprehensive analysis of existing data sources".
4. Given that readily-available peer-reviewed published studies exist which have found evidence of excess profit-taking in the New Zealand electricity distribution industry, I was surprised to see the statement on page 5 of the Report that "We found nothing to suggest grid operator Transpower or distributors are making excessive profits".
5. The history of the distribution companies since they were corporatised in the early 1990s is littered with symptoms of large profits attracting keen-eyed investors. In my own region, Wellington, the Wellington and Hutt networks had a historic-cost asset valuation of \$127 million at 1993 (with the actual distribution assets valued at \$100 million). These assets were quickly bought up by TransAlta NZ Ltd for \$320 million, held for less than two years and then sold to United Networks for \$590 million. After passing through the hands of Vector Ltd the networks were sold in 2008 to another eager buyer, Wellington Electricity Distribution Network Ltd, for \$785 million.
6. Charts 1 and 2 below trace the accrual and realisation of these capital gains which were, as a matter of simple economic logic, losses for consumers, on whom fell the increased network charges without which those capital gains could have been neither sustained nor realised⁵.

⁵ In 1994 the New Zealand Government decreed the use by distribution companies of an Optimised Deprival Valuation (ODV) methodology for valuing their network assets. ODV was a hybrid. The assets' book value was to be the lesser of two components: (i) a discounted-cash-flow (DCF) present value of expected future free cashflows (that is, the capitalised value of future profits), or (ii) the Optimised Depreciated Replacement Cost (ODRC) of the assets (notionally the cost of entry for a new entrant "competing for the market" as a whole, under the wholly unrealistic assumption that such entry could be successfully undertaken against an entrenched incumbent with sunk costs). Starting from the 1993-94 historic cost asset values and corresponding prices, an ODRC asset valuation could not be sustained without raising prices; so ODV was the DCF value of the then-prevailing historic-cost-based prices. The Government of the day wanted the ODRC valuation to prevail; it therefore left prices unregulated and allowed (indeed, urged) distributors to raise their prices until the DCF value was pushed up above ODRC. This process can be seen in Chart 3 of this submission. Later on, as distribution networks were being freely traded at multiples of ODRC (see Chart 2 of this submission) the Government used Part IV of the Commerce Act 1986 to introduce regulation by the Commerce Commission, under which the consistently-preferred ODRC valuation was locked in as a "Regulatory Asset Base" (RAB). That regulation has failed to constrain excess profits; the Wellington network, valued at \$603 million in the Commission's regulatory accounts, is carried on the company's own books at a DCF value of \$881 million.



7. These were not trivial increases in asset value, but they were paid by willing and eager investors motivated by the quest for profit. The untaxed capital gains secured by one after another of these investors were underpinned in “fair value” terms by a rapid increase in the financial operating surplus yielded by rising prices, combined with cost savings that were not passed through to consumers – see Chart 3, based on the annual regulatory information disclosures.



8. In 2008 the Commerce Commission adopted as its Regulatory Asset Base (RAB) the then-prevailing Optimised Deprival Value ODV asset valuations for Wellington as for other regions. A historic-cost methodology has since been applied to adjust the RAB going forward from 2008, but the ODV values remain the dominant component of the RAB⁶, notwithstanding that the ODV methodology was long discredited by 2008⁷.
9. The Commerce Commission's present Regulatory Asset Base is sometimes described as "deemed historic cost" but it needs to be emphasised that up to four-fifths of this

⁶ See for example Commerce Commission, *Asset Valuation Concepts and Practice*, presentation to Electricity and Gas Information Disclosure Seminar March 2013, https://comcom.govt.nz/s/redirect?collection=comcom-www&url=https%3A%2F%2Fcomcom.govt.nz%2F_data%2Fassets%2Fpdf_file%2F0026%2F59624%2FAsset-Valuation-Concepts-and-Practice-Information-Disclosure-Seminar-March-2013.pdf&index_url=https%3A%2F%2Fcomcom.govt.nz%2F_data%2Fassets%2Fpdf_file%2F0026%2F59624%2FAsset-Valuation-Concepts-and-Practice-Information-Disclosure-Seminar-March-2013.pdf&auth=PkCNGYucs8GL6gBE26wltw&profile= default&rank=1&query=Asset+Valuation+Concepts+and+Practice slide 10.

⁷ Stephen Gale and Vhari McWha, *The origins of ODV: Report to Air New Zealand*, Wellington: NZIER, August 2000, p.iv. A key point is that ODV, in its ODRC version, will fail to correspond to the contestability limit at which free entry can occur unless costs of entry are zero and the incumbent has high-value alternative uses into which it can redeploy its assets. The opportunity cost of lines network assets is their scrap value - effectively zero; hence a new entrant would have to set its price at zero have any chance of entering, and would have to be prepared to hold its price at zero indefinitely as it tried to wait out the incumbent's ability to also price at zero. A monopoly incumbent is therefore safe against new entry with its assets at ODRC and its price set accordingly.

consists of the capitalised value of excess profits that have been funded by consumers, not money spent by network owners on actual real investment.⁸ Yet ownership of the increased value lies with owners, not consumers. This arrangement is what the Report has defended as fair. Not everyone will agree, and it would have been good to see that scope for disagreement acknowledged more explicitly in the Report.

10. The Commerce Commission is proposing to allow distributors to recover (again at consumers' expense) accelerated depreciation⁹, in order to bring their asset valuations down to sustainable levels in the face of "competition for the market" arising from new technologies. Having paid elevated capital charges on ODV for twenty years, consumers are now to be compelled to compensate the network owners for the writing-down of asset values that have been inflated by past wealth transfers from consumers to network owners. In effect, as the high asset valuations prove economically unsustainable, consumers are to be asked to pay yet again for the assets at the inflated values, without receiving any ownership rights in return¹⁰. This again is not readily defensible on fairness grounds, however "efficient" it may seem.
11. The Report notes on page 48 that there has been extensive debate over asset valuations, and acknowledges that these are "a critical input in price-quality regulation" (my emphasis). It is a pity, given the centrality of this critically-important component in the price-setting regime, that no information or analysis is offered in the Report on the history of asset valuations, nor on exactly how they enter into the price-quality paths.
12. The Inquiry panel is fully entitled to say (as it does on page 48 of the Report) that it sees "no merit in reopening the methodology used for setting asset values". Nevertheless the Minister of Energy, having commissioned this inquiry, is entitled to receive in the final report a transparent explanation of how the current asset values came about, how this process has affected the setting of the price-quality paths for distributors, and how the experience of the past two-and-a-half decades can be defended as fair to consumers.
13. This would not involve "reopening" the methodological debate - just reporting clearly on the key issue and the outcome of that debate, so that the Minister can reach a well-

⁸ The essential difference between historic cost and other regulatory asset valuation procedures is that the former allows asset owners to recover depreciation and a rate of return only on money that they have actually spent to install the fixed assets required to deliver the service. The classic statement of the case for adopting historic cost and rejecting the competing methodologies is in the decision of the US Supreme Court in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) including the following passage: "Rates which enable the company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risks assumed certainly cannot be condemned as invalid, even though they might produce only a meager return on the so-called 'fair value' rate base".

⁹ *Proposed amendments to Electricity Distribution Services Input Methodologies Determination in relation to accelerated depreciation: Draft reasons paper*
https://comcom.govt.nz/_data/assets/pdf_file/0035/92996/Proposed-amendments-to-electricity-distribution-services-input-methodologies-determination-in-relation-to-accelerated-depreciation-Draft-reasons-paper-23-August-2018.pdf.

¹⁰ At the very least, one would expect that in return for being required by the Commerce Commission to pay for the assets a third or fourth time, consumers should be entitled to recover ownership rights via the dollar-for-dollar transferring (or issuing) to them (or their local government agencies) of shares in the companies.

informed judgment with regard to whether the asset valuation methodology currently in use meets the simple test of fairness to consumers.

14. The exercise conducted in the Report pages 53-55 of multiplying the ODV-derived Regulatory Asset Base by the Weighted Average Cost of Capital (WACC) and using this as the basis for testing for excess profits is of no diagnostic value whatever from an economic or consumer point of view, however convenient it may be for the regulator and the industry. The Report has not found signs of excess profits because it did not go looking for them. By confining analysis to only the last five years of data, rather than to the available twenty-three years of information-disclosure-derived figures, the Report sells its readers (including the Minister) short.
15. The absence from the Report of any in-depth analysis of the extensive financial data published since 1994 under the Electricity (Information Disclosure) Regulations 1994, the Electricity (Information Disclosure) Regulations 1999 and the Electricity Information Disclosure Requirements 2004 seems inconsistent with the statement on page 8 of the Report that “a comprehensive analysis of existing data sources” has been carried out. It has not.
16. In case this is an inadvertent oversight, I draw the Panel’s attention to the financial information on revenues, costs and profits published in the following sources, all of which are readily available on the public record:
 - The Annual Electricity Industry Statistics published under various titles up to 1994;
 - The annual information disclosures by distribution companies published in the *New Zealand Gazette* covering the years 1994 to 2003;
 - The annual information disclosure material collated and published by the Commerce Commission for the years 2004 to 2017;
 - The annual reports of the distribution companies;
 - The annual financial disclosure documents of individual distribution companies, published on their respective websites.
17. It will not come as a surprise to the Inquiry Panel to learn that the collation and analysis of this material is a reasonably onerous task. This, however, is the sort of work for which the Inquiry has commissioned the services of a technically-skilled consultancy with extensive experience in the industry.
18. I would be willing to meet with the Inquiry Panel to discuss this submission.

Yours sincerely



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