CALCULATION OF TAX DEPRECIATION ALLOWANCES FOR REGULATORY PURPOSES

STATEMENT FOR POWERCO LTD

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Introduction

Experience

1. My name is Jeffrey John Balchin of 11/77 Eagle Street Brisbane, Australia. I am a director of The Allen Consulting Group, which is an Australian economics and public policy firm with offices in most of the major capitals in Australia (Melbourne, Sydney, Canberra, Perth and Brisbane) and staff of about 50 consultants.

2. I have over ten years of experience in infrastructure regulation matters across a wide range of industries, first in the Australian public service and then since early 1996, with The Allen Consulting Group. In my role at the Group, I have worked for almost every economic regulator in Australia, which has included substantial projects for the Victorian Essential Services Commission, the South Australian Essential Services Commission, the West Australian Economic Regulatory Authority, Queensland Competition Authority and the Australian Competition and Consumer Commission.

3. In addition to advising regulators, I also have as clients a number of large consumers (including BHP Billiton) and infrastructure owners (such as the Murraylink Transmission Company, and its owners, TransEnergie Australia and SNC Lavalin). My work on infrastructure regulation has spanned a number of industries, including gas, electricity, ports, rail and water.

4. The major projects that I have undertaken in this regard are described in my curriculum vitae at Attachment A.

5. As indicated at paragraph 14 of Powerco's submission of 23 September 2004 and as will be discussed further below, one of the matters that Powerco has asked me to address is the approach that the Victorian Essential Services Commission (then the Office of the Regulator-General) took in relation to certain taxation issues during its 2001 review of the price controls of the five electricity distributors.[1] During that review, I was contracted to the Commission to advise, amongst other things, on all matters of a financial nature, including on the estimation of the cost of capital, the treatment of taxation, and overall oversight and responsibility for the Victorian Essential Services Commission's financial modelling. This role included drafting the relevant parts of the Victorian Essential Services Commission's various consultation papers and decision documents, and appearing as an expert witness on two technical finance matters during the merits review of the Victorian Essential Services Commission's decision in late 2000.

6. I had previously worked for the Victorian Essential Services Commission in a similar capacity in relation to its setting of the price controls (and related matters) for the three Victorian gas distributors in 1998, and since on the 2003 review of the price controls for the gas distributors. I am currently engaged by the Victorian

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[1] The review was referred to as the 2001 Electricity Distribution Price Review. The new price controls entered into effect on 1 January 2001. The actual review took place over approximately mid 1998 until the end of 2000, with an (unsuccessful) judicial review taking place in 2001.

Essential Services Commission to provide advice in relation to its 2006 review of the price controls for electricity distributors, and on the setting of the price controls for the Victorian water businesses.

7. Notwithstanding my extensive work for the Victorian Essential Services Commission (and its predecessor, the Office of the Regulator-General) and ongoing extensive engagement, however, the views in this statement are my own alone.

Brief

8. Powerco has asked me to comment on the Commerce Commission's proposed derivation of tax depreciation allowances in its proposed method of calculating 'excess returns'. The issue of concern is how the tax depreciation allowance should be calculated where an entity has recently been traded, and the purchase price paid for the regulated assets is an amount that exceeds its previous taxation value, and in particular, exceeds its previous regulatory value (ODV).

9. An entity's 'excess return' for a particular year is defined as the amount by which the surplus earned by an entity over operating costs, depreciation and company tax exceeds a reasonable return, the latter of which is a return (in dollar terms) that would deliver a rate of return on the entity's regulatory asset base (ODV) equal to the estimated cost of capital of the regulated activity. As the assumed company tax expense will depend upon the assumption made about the tax depreciation allowance, this latter assumption will affect the conclusion made as to whether an entity has made an 'excess return'. All else constant, a higher assumed tax depreciation allowance would imply a lower company tax expense, and hence a greater likelihood that the entity was judged to have made an 'excess return'.

10. Powerco has asked that I comment on how the Victorian Essential Services Commission (then the Office of the Regulator-General) calculated tax depreciation allowances in its modelling of taxation in its 2001 Electricity Distribution Price Review, and the reasoning behind its decision. In that case, the recent substantial restructuring and privatisation in the industry implied that a new opening tax value for the regulated electricity distributors needed to be determined, and all of the businesses had been purchased for amounts substantially in excess of their regulatory values. I have also been asked to comment more generally on the Commerce Commission's proposed treatment of asset sales when deriving tax depreciation allowances based on advice from Professor Martin Lally in his paper entitled *The Treatment of Gains on the Sale of Assets*, dated 2 September 2004 (hereafter referred to as Lally 2004).

11. In the discussion below, two related issues are raised with the approach the Commerce Commission has proposed to adopt for assessing tax depreciation allowances when assets are sold.

    - The first issue is whether it is reasonable to adopt an opening taxation value that exceeds the opening regulatory asset value at the time that a system of formal cost-based regulation commences, if it is decided that there is a need for a new opening tax value to be determined.

- The second issue is, more generally, whether it is appropriate to take account of asset sales over time when calculating tax depreciation allowances for the purpose of deriving 'excess returns', or whether it would be more appropriate to ignore those transactions when making such a calculation.

12. The remainder of this paper addresses these two issues in turn. The next section addresses the question of how these two issues have been addressed by the Victorian Essential Services Commission in a similar case, and some of the reasons behind the Commission's approach. The section thereafter then focuses on the actual approach proposed by the Commerce Commission on the advice of Professor Lally, and sets out my concerns on this matter. The final section concludes.

Derivation of Tax Depreciation Allowances – Approach Adopted by the Victorian Essential Services Commission

Summary of Comments

13. The practice of regulation in Australia – and in particular, that of the Victorian Essential Services Commission – should guide the Commerce Commission in its deliberations over how to treat the prices paid in asset sales when deriving tax depreciation allowances.[2]

14. At the start of the new electricity regulatory regime, the Essential Services Commission decided implicitly that the history of the industry and level of restructuring implied that a new opening tax value for the electricity distributors needed to be determined. The Commission was required to set price controls for five businesses, the owners of which had all paid well in excess of the regulatory values for the businesses, and who were believed to be able to write-off the whole of the purchase price for tax purposes. The Commission concluded that it would have been unreasonable and not internally consistent to adopt the higher sale price for the businesses when calculating tax depreciation allowances, but to calculate the required returns and to analyse financial viability on the assumption that the businesses' investments comprised only the regulatory values of the entities.

15. There have also been a number of subsequent sales of the regulated Victorian assets, many of which would have permitted the purchasers to reset their opening tax values to the relevant purchase prices. The Essential Services Commission has been careful to ignore these transactions when deriving the taxation allowances that are reflected in regulated prices. Its main reason for ignoring these transactions stems from a fundamental principle that has been adopted by Australian economic regulators, which is that regulated prices should be set independent of the regulated entities' actual financing decisions to the extent possible. This includes the implications of asset sales. Setting prices independent of the entities' actual financing decisions provides the entities with incentives to make efficient financing decisions, and shields customers from inefficient

[2] The Victorian Essential Services Commission commenced operation from the start of 2000, and prior to that time the same functions were undertaken by the Victorian Office of the Regulator-General. The authority's current title is used in this report for brevity.

decisions. It also shields customers from paying higher prices as a result of transactions that benefit parties to the transaction, but not final customers. Ignoring financing decisions also implies that regulators are not required to form a view on the prudence of financing decisions, which they are not well positioned to make.

16. Specifically in relation to asset sales, the net impact on the cost borne by the industry would rise if the assets are sold over their taxation value (that is, if the full tax consequences are considered – see the comments on the Commerce Commission's proposed approach below). As such sales have no effect on physical investment in the industry (and hence the value of the services provided to customers), it is difficult to see why customers should pay higher price as a result of such sales.

Privatisation of the Victorian Electricity Distributors

17. Some five years before the Victorian Essential Services Commission's 2001 review of the price controls for the five electricity distributors, the businesses had been sold (privatised) by the Victorian Government.[3] Price caps covering the period until 31 December 2000 had been set by the Government prior to their privatisation in a regulatory instrument that was referred to as the Tariff Order.[4] The Tariff Order also set out a number of constraints on the Commission's future review of the price controls for the distributors, including:[5]

    - that the new price controls not come into effect prior to 31 December 2000;
    - it specified a regulatory asset value for each of the distribution businesses as at 1 July 1994, and the regulator was required to adjust this starting value over time only for depreciation, disposals and inflation;[6]
    - that the regulator 'utilise price based regulation adopting a CPI-X approach and not rate of return regulation'; and
    - that the new controls ensure a fair sharing of the benefits achieved through efficiency gains made during the first regulatory period (ie the period until 31 December 2000).

18. The businesses were sold for prices that far exceeded expectations at the time. As all of the distribution businesses were sold combined with a retail business, it is not possible to observe directly from publicly available information how much

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3 The privatisations were announced on various dates between August and December 1995, and financially effective on either 30 June 1995 or 30 September 1995.

4 Victorian Electricity Supply Industry Tariff Order, Order by the Governor in Council under section 158A of the Electricity Industry Act 1993.

5 Victorian Electricity Supply Industry Tariff Order, Order by the Governor in Council under section 158A of the Electricity Industry Act 1993, clause 5.10.

6 That is, 'optimisation' of the assets in place as at 1 July 1994, or any other form of revaluation according to an exogenous methodology (such as ODV), was precluded.

was paid for the distribution businesses alone in order to make comparisons with their regulatory values; however, estimations are possible.

19. I have undertaken such an exercise for an unrelated matter, and my best estimates of the prices that were paid for the Victorian electricity distribution businesses as a ratio of their regulatory values are set out in Table 1 below. The different ratios correspond to different assumptions about the values of the retail businesses (on a dollar-per-customer basis), with the ratios set out in the rightmost column reflecting an assumption about the values of Australian electricity retailers that is consistent with subsequent retailer-only sales.

TABLE 1
VICTORIAN ELECTRICITY PRIVATISATIONS: RATIO OF DISTRIBUTION PURCHASE PRICE TO REGULATORY VALUES

Business	Estimated RAV	DISTRIBUTION PURCHASE PRICE / RAV			
		Retail = $200/cust	*Retail = $600/cust*	*Retail = $1000/cust*	*Retail = $580 to $587/cust*
United Energy	936	1.5	1.3	1.1	1.3
Solaris	448	2.0	1.8	1.6	1.8
Eastern Energy	906	2.2	2.0	1.8	2.0
Powercor	1,123	1.8	1.6	1.4	1.6
CitiPower	656	2.3	2.2	2.0	2.2

Source: The Allen Consulting Group 2003, Review of the Gas Code: Commentary on Economic Issues, report to BHPBilliton, August, Chapter 5 and Appendix A (available at www.allenconsult.com.au). The assumptions behind the analysis and references to all original sources are set out in detail in this report. The asset sales all occurred in 1995.

20. Accordingly, at the time of its 2001 review of the Victorian electricity distributors' price controls, the Essential Services Commission was aware that all of the regulated distribution businesses had been purchased for amounts that exceeded their regulatory values by a substantial margin.

Treatment of Taxation and Tax Depreciation

21. Before discussing the approach that the Essential Services Commission used to derive the opening taxation values for the electricity distributors, it is important to understand its overall approach to the modelling of taxation liabilities for the businesses.

22. The derivation of taxation allowances for the electricity distributors was one of the most significant of the finance-related issues in the Essential Services Commission's 2001 price review, as indeed it had been in its 1998 review of the gas distribution prices.[7] The major issue for the treatment of taxation concerned which depreciation methodology should used to derive taxation allowances. The distributors argued (in effect) that regulatory depreciation allowances should be used to derive the taxation allowances for the firms.[8] The main arguments

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7 For a discussion of the issue in the earlier review, refer to: Office of the Regulator-General, 1998, Access Arrangements for Multinet, Wester and Stratus: Final Decision, October, Appendix C 14.

8 The actual proposal of the businesses was to compensate for taxation liabilities by using a pre-tax cost of capital, which was to be calculated by grossing-up (transforming) an after tax cost of

presented by the distributors were that any attempt to model the actual tax treatment of the industry would involve the Commission in an exercise that was more complex than justifiable, that setting prices to reflect the distributors' actual taxation payments would reduce their incentives to be efficient in their taxation affairs, as well as a number of other matters (including broader public policy concerns).[9]

23. The Essential Services Commission concluded that the allowance for taxation should, as far as possible, reflect an unbiased estimate of the likely taxation liabilities of an efficient firm in the position of the Victorian electricity distributors. Important in this regard is that an efficient firm would make use of the more beneficial tax depreciation rates available under the taxation laws. Accordingly, the Commission rejected the distributors' proposals that the taxation allowance should be calculated using regulatory depreciation rates rather than tax depreciation rates. However, the Commission also accepted some of the distributors' concerns, namely that care needs to be taken to ensure that the treatment of taxation does not erode the distributors' incentives to be efficient in their tax affairs, and that the complexity of the analysis should be kept to a level that was justifiable.

24. The approach the Essential Services Commission adopted was to make its own assumptions (benchmarks) about the major tax-related decisions the distributors would have to make, consistent with its views about how an efficient business would act, and make its own special purpose calculation of depreciation on this basis. By adopting benchmarks for the businesses' major tax-related decisions, the risk of a lessening of the businesses' incentives to be efficient in their tax affairs would be minimised. The Commission was also careful to adopt assumptions in its taxation calculations that were consistent with the assumptions already required to set price controls (such as revenue and expenditure forecasts), in order to ensure internal consistency in its analysis.

25. The derivation of the tax depreciation allowances was the most complex of the taxation issues addressed by the Essential Services Commission – and, as discussed above, the most controversial. The approach taken by the Commission to derive depreciation allowances was as follows:[10]

    - *Unitisation policy* – an assumption was made about how units of property would be defined for tax purposes based upon professional taxation advice, which determined the split between the capital expenditure that would be depreciable and deductible for tax purposes. The split between depreciable and deductible expenditure differed to the split used for regulatory purposes – in particular, there was a substantial portion of expenditure that would be

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capital by the company tax rate. Which of the different forms of transformation should be used generated substantial confusion throughout the review, however.

[9] See, for example, Office of the Regulator-General, 2000, 2001 Electricity Distribution Price Review – Issues Paper, February, p.97.

[10] Office of the Regulator-General, 2000, Electricity Distribution Price Determination 2001-2005: Volume 1 – Statement of Purpose and Reasons, September, pp.309-311.

capitalised for regulatory purposes, but would be immediately deducted for tax purposes.

- *Classes of assets* – a set of asset classes relevant for taxation purposes was established, again based on professional taxation advice. These classes differed to the classes used to derive regulatory depreciation allowances. The assets in place at the commencement of the regulatory regime (1 July 1994) and subsequent capital expenditure was divided into these classes.

- *Tax depreciation lives / method* – an assumption about the effective lives for taxation purposes and the method of depreciation were adopted for the different asset classes, again based upon professional taxation advice. The asset lives and method both implied a more accelerated rate of depreciation compared to that used for regulatory purposes.

26. Accordingly, the Essential Services Commission's 'benchmark' derivation of the tax depreciation allowances reflected a detailed consideration of the treatment of electricity distribution assets for taxation purposes, and took account of the more generous depreciation allowances permitted for tax purposes. However, as noted above, the tax depreciation allowances that were used to calculate the distributors' regulated prices were derived as a special purpose calculation (that is, for regulatory purposes), and could easily differ to the tax depreciation allowances that the businesses actually claim for tax purposes. The Commission has since used the same approach to determining benchmark taxation allowances for the Victorian gas distributors.[11]

Assumption about the Opening Asset Value for Taxation Purposes

27. Clearly, the assumption the Essential Services Commission adopted for the value of the assets for tax purposes at the commencement of the new regulatory period (1 January 2001) would have a substantial impact on the level of the taxation allowance for the electricity distributors, and hence the prices they would be permitted to charge.

28. The conclusion was reached implicitly that it would be appropriate to establish a new starting taxation value for the entities. In the years preceding the 1995 privatisations, the Victorian electricity supply industry had been restructured from a Government-owned vertically integrated entity (with a number of small, local council-owned retailer/distributors) into six generation businesses, five retailer/distributors, a transmission business and a market operator/grid planning entity, and all except the market operator/grid planning entity were privatised. Accordingly, it was not clear how easily previous taxation values for the entities could be transferred to the new entities, and nor was it known how reliable the pre-privatisation tax-equivalent regime had been. The standard that was adopted for deriving the opening tax value was the same as that adopted generally for its modelling of taxation – that is, the opening taxation value of an efficient firm in the position of the Victorian electricity distributors.

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[11] Essential Services Commission, 2002, Review of Gas Access Arrangements – Final Decision, October, pp.380-395.

29. The Essential Services Commission considered two options for setting the starting tax values of the businesses' assets, which were either to:

    - start the calculation of tax depreciation from the start of the regulatory regime (1 July 1994), and reset the opening tax value of the assets to the regulatory value of the assets at that point in time; or

    - start the calculation of tax depreciation from the start of the new regulatory period (1 January 2001), and reset the opening tax value of the assets to the regulatory value of the assets at that point in time.

30. The former of these two options was chosen – that is, the opening tax values of the businesses were reset to their regulatory values as at 1 July 1994, which was the commencement date of the new regulatory regime.[12] The only discussion the Essential Services Commission presented in its various consultation and decision papers on the other option of using the distributors' purchase prices for the businesses to set the opening taxation value of the regulated businesses was presented in a footnote of its *Issues Paper*:[13]

    > The Office understands that distributors could write-off the whole purchase price of the assets for tax purposes, and that the purchase price significantly exceeded the regulatory asset base for those businesses. However, the Office has not proposed to use the purchase price as this would be inconsistent with the benchmarks adopted elsewhere in determining benchmark revenue requirements.

31. The inconsistency noted by the Essential Services Commission between the use of the businesses' purchase costs as the opening tax values, and the other assumptions it would adopt to set the distributors' regulated prices is explained by the objective the Commission had specified for setting regulated charges, and its relationship to the regulatory value of the businesses. This objective was specified as follows:[14]

    > The **regulatory asset base** represents the regulator's view of the value of the existing investment in the regulated entity at any point in time. Accordingly, the objective of the regulator is to provide, through the benchmark revenue requirement, a revenue stream that has a present value equal to the regulatory asset base (on the assumption that all of the benchmarks – such as operations and maintenance costs – are correct).

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[12] Office of the Regulator-General, 2000, Electricity Distribution Price Determination 2001-2005: Draft Decision, May, p.182.

[13] Office of the Regulator-General, 2000, 2001 Electricity Distribution Price Review – Issues Paper, February, p.103, footnote 101. The Essential Services Commission subsequently received submissions from some of the businesses claiming that whether the businesses actually could reset their opening tax value of the businesses in line with the purchase cost was not free from uncertainty, and it was claimed that at least one had reset its opening tax value at its 1 July 1994 regulatory value. These submissions explain the Essential Services Commission's subsequent more careful language about the distributors' actual tax depreciation allowances (eg Office of the Regulator-General, 2000, Electricity Distribution Price Determination 2001-2005: Draft Decision, May, p.182, footnote 386). Note that the Essential Services Commission had the necessary powers to obtain information on the distributors' actual tax depreciation deductions and other decisions, but chose not to.

[14] Office of the Regulator-General, 1999, 2001 Electricity Distribution Price Review – Cost of Capital Financing (Consultation Paper No.4), May, p.6.

32. Hence, the Essential Services Commission's objective for prices, if achieved, would have resulted in the regulated businesses having market values equal to their regulatory values (plus the capitalised value of the benefits expected from efficiency gains). Throughout the course of the review, representations were made by various parties that one of the reasons why the businesses had paid in excess of the regulatory values for the distribution businesses was because the purchasers at the time of privatisation had different expectations about how the regulatory regime set out in the Tariff Order would operate in the future than what the Essential Services Commission proposed in its various consultation papers and decision documents.[15] These representations were supported by claims that various representations were made during the privatisation process about how those businesses should expect to be treated in the 2001 electricity distribution price review.

33. The proposition put by the businesses (in effect) was that, because they had formed these expectations and factored the expectations into the prices paid for the businesses, the new regulated prices should include a 'transitional allowance' to phase in the consequences of what they considered to be a change to the regulatory regime. One of the Essential Services Commission's statutory objectives for the price review was to 'facilitate the maintenance of a financially viable electricity supply industry',[16] and a number of parties argued that the assessment of financial viability should take account of the actual balance sheet position of the businesses (which reflected the actual purchase prices).

34. The Essential Services Commission rejected the distributors' propositions for a 'transitional adjustment', and also rejected the proposal to take account of the distributors' actual balance sheet positions (and hence, their purchase prices) when undertaking its assessment of the implications of its decision for the financial viability of the industry. In rejecting these propositions, the Commission in effect was rejecting the implicit proposal by the distributors that regulated prices should be higher as a result of the high purchase prices the businesses paid. The Commission stated this explicitly as follows.[17]

> The Office believes that to contemplate a situation where the purchase price for a regulated business were to have an impact on the tariffs that customers pay would be fundamentally at odds with both the legal framework for this review and the objectives of incentive-based, price cap regulation.

35. After concluding that the regulated prices should only preserve the regulatory values of the businesses (and rejecting the proposition that the regulated prices should be set to preserve some or all of the premia paid for the businesses at privatisation), it would have been internally inconsistent for the Essential Services

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[15] While a number of elements of the regulatory regime were prescribed in the Tariff Order (as discussed in paragraph 17), large areas for judgement by the regulator remained. A key issue in this regard was the share of the benefits that the businesses should expect to receive for making efficiency gains during the first regulatory period (and indeed, how efficiency gains are defined and quantified). A second area where scope for judgement on a material issue remained was the estimate of the cost of capital associated with the distributors' regulated activities.

[16] Electricity Industry Act 1993, section 157.

[17] Office of the Regulator-General, 2000, Electricity Distribution Price Determination 2001-2005: Volume 1 – Statement of Purpose and Reasons, September, p.166.

Commission to use the purchase prices of the businesses to set their opening tax values. While the use of the higher value for the opening taxation value would only have resulted in a transfer of wealth from the businesses to customers (that is, only the returns to sunk assets would be affected – there need not be an effect on the returns to future investment), such an approach would have failed the basic test of being reasonable.[18] That is, a reasonable approach would be one that adopted a starting asset value for calculating tax depreciation allowances that was no higher than the value being used to derive the regulated businesses' required returns – which was Commission's approach. At the time of the release of the *Issues Paper*, which included the Essential Services Commission's only discussion of this issue (refer to paragraph 30), none of the Commission's advisers nor the regulator considered that the use of the purchase prices of the businesses to set the opening taxation values was an option that could be contemplated.

Treatment of Subsequent Asset Sales

36. The discussion above related to the Essential Services Commission's approach to setting the opening taxation values for the electricity distributors in its 2001 electricity distribution price review. An issue of equal relevance to the Commerce Commission's current matter is how the Essential Services Commission has treated subsequent sales of the entities when deriving tax depreciation allowances.

37. One of the features that has characterised the Australian energy industry over the last 10 years is the substantial number of sales of entities that have taken place since the initial privatisations. Table 2 sets out the post-privatisation transactions that have occurred with the Victorian entities alone.

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[18] All Australian regulators are aware that decisions in relation to returns on sunk investment may shape how investors think regulators may exercise their substantial discretions in relation to future investments, and so unreasonable decisions in relation to returns on sunk assets may affect investment incentives.

TABLE 2
POST-PRIVATISATION TRANSACTIONS INVOLVING REGULATED VICTORIAN ENERGY ENTITIES

Privatised Entity (Initial Sale Date, Purchasing Entity)	Subsequent Transaction 1	Subsequent Transaction 2
Electricity Distribution		
Solaris (1995, GPU/AGL)	GPU share sold to AGL (1998)	
Powercor (1995, PacifiCorp)	Sale to CKI/HEH (2000)	
CitiPower (1995, Entergy)	Sale to AEP (1998)	Sale to CKI/HEH (2002)
United Energy (1995, Power Ptn.)	Public listing (1998)	Sale to Alinta / DUET (2003)
Eastern Energy (1995, TXU)	Sale to SPI (2004)	
Gas Distribution		
Westar (1999, TXU)	Sale to SPI (2004)	
Status (1999, Envestra)	–	
Multinet (1999, Energy Ptn.)	Sale to Alinta / DUET (2003)	
Electricity Transmission		
PowerNet (1997, GPU)	Sale to SPI (2000)	
Gas Transmission		
GasNet (1999, GPU)	Public listing (2001)	

38. Of the 10 electricity and gas distribution and transmission businesses that were privatised by the Victorian Government, only one of these (the gas distributor, Stratus) has not been the subject of a further sale. Many of these sales would have provided the purchasers with the ability to reset the tax values of the businesses to reflect the purchase cost, and also exposed the seller to pay tax on its profit on disposal.

39. Neither the Essential Services Commission (which has responsibility for regulating the distribution businesses) nor the Australian Competition and Consumer Commission (which has responsibility for regulating the transmission businesses) has adjusted its calculation of tax depreciation to reflect the outcomes of any of these transactions when deriving the allowance for taxation included in regulated charges. For the electricity distributors, the Essential Services Commission has continued to adopt its own calculation of tax depreciation allowances reflecting the deemed value of the assets as at 1 July 1994, and then adjusted thereafter to reflect capital expenditure and its own calculation of tax depreciation, as explained in paragraphs 23 to 26, above.

40. One of the Essential Services Commission's reasons for ignoring the implications of asset sales when deriving taxation allowances is consistent with the Essential Services Commission's objective of only introducing additional complexity into the calculation of the taxation allowance where it is warranted.

41. A second and more important reason for ignoring the implications of asset sales when calculation taxation liabilities is that this reflects the fundamental principle adopted by Australian economic regulators that prices should be set independently of the regulated entities' actual financing decisions to the extent possible.

42. By setting prices independently of the entities' actual financing decisions, the incentives for the entities to finance in the most efficient manner are preserved, and customers are insulated from inefficient financing decisions. In addition, the costs actually associated with complex financing arrangements are generally obvious, but the benefits harder to identify (and hence, harder to pass on to customers through lower regulated prices). The other option would be to take account of firms' actual financing decisions when setting regulated charges, which would reduce incentives for efficient financing decisions, and require the regulator to assess the prudence of these decisions – for which regulators are not well placed. The Essential Services Commission commented on this issue as follows (with specific reference to the acquisition prices of the firms):[19]

> The requirements of the Tariff Order in relation to asset values also give effect to one of the most important features of the regulatory regime established for the Victorian electricity businesses, namely the absence of regulatory involvement in the financing decisions of the distributors.
>
> More generally, the entire regulatory regime in Victoria has developed with an emphasis on the pre-financing circumstances of the electricity distributors. For example, the distributors are not required to operate or finance their regulated activities as separate legal entities, with arms length relationships to any other business activity they may seek to engage in. Similarly, the Office has no regulatory involvement or oversight of the dividend, debt, tax or other financing decisions of the distributors. Furthermore, no distributor sought to supply such information in its December 1999 price-service proposal, or in subsequent submissions in relation to the *Draft Decision*.
>
> Even if the Office was inclined to take into account the acquisition price for any of the distribution businesses, consistency with the objectives against which the pricing determination must be measured would require the Office to form a view on the extent to which those prices were prudent and efficient. Such a task is clearly not one the Office is reasonably able to undertake.

43. As discussed in the next section below, the full consequences of an asset sale (where the sale price is above its taxation value) is that the taxation incurred by the industry would *rise* in present value terms (rather than *fall*, as suggested in Lally 2004). The fact that the parties to the transaction were willing to enter into the transaction is evidence that both stood to benefit (or at least one benefited and the other was no worse off), notwithstanding the additional taxation liability. However, if the transaction is unrelated to physical investment in the network, then it is difficult to see how customers could benefit, and so it would be inappropriate to seek to pass on the higher taxation liability to customers.

Comments on the Commerce Commission's Approach

Summary of Comments

44. I consider that it was inappropriate for Professor Lally to recommend that the Commerce Commission take account of asset sales when deriving tax depreciation allowances (and hence excess returns), without also recommending to the Commission a method to deal with the 'lumpy' tax consequences associated with asset sales. In particular, unless a method to smooth out the lumpy effects is adopted, then there is a bias towards finding that 'excess returns' are present, when in fact the opposite would be the case.[20] Indeed, the Commission's proposed

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[19] Office of the Regulator-General, 2000, Electricity Distribution Price Determination 2001-2005: Volume 1 – Statement of Purpose and Reasons, September, p.166.

[20] The term 'bias' is used in this report to refer to its meaning in statistics, rather than its plain English meaning.

approach of taking into account past asset sales to impute a continuing tax benefit to the current asset owner – but ignoring the one-off taxation liability of the selling party – would make it more likely that an asset sold in the past for above its tax value is judged currently to be making 'excess returns', when in fact the opposite should be the case. The Commission's proposed approach does not pass its adviser's own test of reflecting 'the underlying economic situation'.[21]

45. Rather, Professor Lally's recommendation to take account of asset sales when calculating excess returns should have been accompanied with a recommended method to smooth out the one-off taxation consequences of asset sales, to ensure that 'excess returns' calculated in the years subsequent to the asset sale do not give a materially misleading indication of the presence of 'excess returns'. The most appropriate method for smoothing the lumpy taxation effects is derived below.

46. However, a simplification to the correct method for smoothing out the taxation effects is also derived. This simpler method is mathematically identical to ignoring asset sales altogether when deriving tax depreciation allowances for regulatory purposes. While this simpler approach is biased in favour of a finding of zero 'excess returns' when in fact the industry had made inadequate returns, the bias in the calculated annual 'excess returns' would be much lower than if asset sales were recognised but no attempt were made to smooth out the lumpy taxation effects. The risk that taking asset sales into account when deriving tax depreciation will generate materially misleading annual 'excess returns' – as well as the objective of overall simplicity – of themselves provide powerful arguments to ignore the implications of asset sales when deriving tax depreciation allowances.

Objectives for the Tax Depreciation Approach

47. Before commenting in detail on the approach the Commerce Commission has proposed and the specific advice on this matter from Professor Lally, a comment on the principles against which the approach to deriving the tax depreciation allowance when calculating 'excess returns' is appropriate.

48. Professor Lally has posed a number of principles for assessing the alternative treatments of asset sales, including that intra sector transactions should not matter,[22] that transactions with the remainder of the economy should matter,[23] and that the 'present value principle' should be met.[24] These principles are narrower than the principles that an economic regulator generally would establish when considering a new or novel matter. Regulators generally establish an overarching objective – typically economic efficiency – and then define the factors that contribute to this overarching objective. If the overarching objective is economic efficiency, these factors would acknowledge a trade-off between the desires, on

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[21] Lally (2004), p.8.

[22] Lally (2004), p.2.

[23] Lally (2004), p.4.

[24] Lally (2004), p.5.

the one hand, for prices to be close to cost in order to minimise allocative efficiency losses, but on the other, to ensure that incentives are provided for investment in the regulated networks and hence continued service provision. A further factor – which modern regulatory practice places substantial weight upon – is that incentives are provided for efficient behaviour by the regulated entity (including efficiency in such matters as cost, the level of service provided, uptake of technical changes and financing decisions).

49. Professor Lally's 'present value principle' clearly is relevant to considering the point at which prices are sufficiently low to minimise allocative efficiency losses without compromising investment incentives (indeed, in a world of perfect certainty, the present value rule would be a sufficient rule). However, other principles are also relevant to establishing the appropriate point along the trade-off between reducing prices and preserving investment incentives. In particular, as it is common for regulators to be provided with substantial discretion, acting consistently and reasonably in any particular matter can provide an important signal to investors about how the regulator may act in the future, which can have important implications for regulated entities' incentives to invest now. In addition, Lally's present value rule and other principles do not place any weight on the importance of providing incentives for regulated entities to be efficient. Accordingly, there is a risk that Lally's proposed principles may lead to relevant matters not being considered – this matter is returned to in paragraph 78.

Effect of Asset Sales on Industry Returns

50. First, however, I note that Professor Lally appears to have made an error in the computation of the present value of the industry's cash flows in the case where the asset is sold for $12 million, which is relevant to the discussion below.[25] The relevant steps in Lally's calculation are as follows:

- A revenue stream was set to deliver a net present value of zero over the two-period life of the asset on the assumption that the asset is held by the same owner until the end of its life. However, the asset is sold for $12 million at the end of year 1.

- No tax depreciation is claimed in year 1 by the selling party (presumably because its profit on disposal of $7 million exceeds the tax depreciation in that year of $5 million).

- The purchaser claims tax depreciation of $12 million in year 2, reflecting its purchase cost.

- The additional tax depreciation claimable in year 2 has *reduced* the tax payable compared to the situation where the asset was not traded – with the effect that if prices (and hence, revenue) remain at the same level, the industry is found to have made 'excess returns' (reflecting the fact that the net present value of its cash flows is +$0.41 million).

[25] Lally (2004), p.6.

51. The error in the calculation above is that Professor Lally appears to have ignored the fact that the seller of the asset would be taxed on its full profit on disposal of the asset. Accordingly, the full implications of the transaction are as follows:

   - The seller of the asset would claim tax depreciation of $5 million in year 1, but also be taxed on its profit from disposal of $7 million.
   - The purchaser of the asset would claim a tax depreciation allowance of $12 million in year 2.
   - The present value of the industry's cash flows would be calculated correctly as follows:

$$PV = \frac{9.59 - 3.1 - 0.33(9.59 + 7 - 3.1 - 5)}{1.10} + \frac{8.95 - 3.2 - 0.33(8.95 - 3.2 - 12)}{(1.10)^2}$$
$$= 9.81$$

52. That is, rather than making a positive net present value of +$0.41 million (and an 'excess return'), a *negative* net present value of -$0.19 million would be made, and hence a return that is lower than the cost of capital associated with the activity.

53. It is noted that as the example used by Professor Lally assumes that the asset only exists for two years, the precise timing of the asset sale is critical, and the more general implications of asset sales for taxation liabilities are more difficult to observe. In particular, if the sale of the asset in the example above had taken place one hour after the start of the second year (rather than one hour before the end), then the profit on disposal would be payable in respect of the next financial year, and the net present value of the industry's cash flow would be zero.[26]

54. Table 3 below shows the impact of the sale of an asset on taxation payments that is based on Professor Lally's model, but where it is assumed that the asset has a life of 10 years. The assumptions in the analysis are as follows:

   - The revenue stream is calculated to deliver a net present value of zero on the assumption that the asset is not traded over its life (following the assumption of Lally).
   - Original cost of $10 million, 10 year life, and straight-line depreciation over the asset's useful life adopted for both regulatory and tax purposes.
   - Operating expenses (excluding taxation) of $3.1 million per annum, and a discount rate of 10 per cent (following the assumption of Lally, the discount rate is assumed to already reflect the benefit of interest deductibility, and so interest deductions are ignored in the calculation of taxation).

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[26] That is, in year 1, there would be tax depreciation of $5 million, and in year 2, there would be tax depreciation of $12 million and a profit on disposal of $7 million, which would deliver the same tax payments as tax depreciation of $5 million in each year.

- A sale of the asset on the first day of year 6 for $12 million, which compares to its tax value of $5 million at that time.

TABLE 3
TAXATION CONSEQUENCES OF ASSET SALES

Year	1	2	3	4	5	6	7	8	9	10
Return on Assets	1.00	0.90	0.80	0.70	0.60	0.50	0.40	0.30	0.20	0.10
Operating Expenses	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
Reg. Depreciation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Taxation	0.49	0.44	0.39	0.34	0.30	0.25	0.20	0.15	0.10	0.05
Revenue	**5.59**	**5.44**	**5.29**	**5.14**	**5.00**	**4.85**	**4.70**	**4.55**	**4.40**	**4.25**
No Sale of the Asset (Base Case)										
Tax Depreciation	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Profit on Disposal	–	–	–	–	–	–	–	–	–	–
Tax Payable	0.49	0.44	0.39	0.34	0.30	0.25	0.20	0.15	0.10	0.05
Cash Flow	2.00	1.90	1.80	1.70	1.60	1.50	1.40	1.30	1.20	1.10
PV of Cash Flow	**10.00**									
Excess Return	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Sale at Start of Year 6										
Tax Depreciation	1.00	1.00	1.00	1.00	1.00	2.40	2.40	2.40	2.40	2.40
Profit on Disposal	–	–	–	–	–	7.00	–	–	–	–
Tax Payable	0.49	0.44	0.39	0.34	0.30	2.09	-0.26	-0.31	-0.36	-0.41
Cash Flow	2.00	1.90	1.80	1.70	1.60	-0.35	1.86	1.76	1.66	1.56
PV of Cash Flow	**9.78**									
Excess Return	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-1.85**	**0.46**	**0.46**	**0.46**	**0.46**
Zero E.R. Revenue	**5.59**	**5.44**	**5.29**	**5.14**	**5.00**	**7.60**	**4.01**	**3.86**	**3.71**	**3.56**

55. The calculations set out in the table above are as follows. The first five rows of calculations derive the cost-based revenue stream, using the same method as Professor Lally, but with the separate components identified. The next 6 rows of calculations then demonstrate that the revenue derived is consistent with generating cash flows with a present value equal to the cost of the asset (zero net present value) and also generate a zero 'excess return' in each year. The remaining 7 rows of calculations then show the full impact of the assumed sale in the asset at the start of year 6. The implications of this sale are as follows.

    - There is a rise in the tax depreciation allowances for years 6 onwards as the higher purchase price of the asset is written off over its remaining life. However, tax on the profit on disposal is also payable in respect of that year. As a result, compared to the base case, tax payments are higher in year 6, but then lower over the remainder of the asset's life.

- The change in the timing of tax payments reduces the present value of the asset's cash flow from $10.00 to $9.78 (implying a *negative* net present value of -$0.22). Note that the effect of selling an asset at above its taxation value is to *advance* future taxation liabilities – the reduction in the present value of cash flow reflects the time-cost of this advancement.

- The calculated annual 'excess return' is *negative* in the year of the sale (-$1.85), but then *positive* thereafter (+$0.46 per annum). Note that the 'excess earnings' over the life of the asset is negative (ie reflecting the situation that inadequate returns had been made), consistent with the negative net present value of the cash flows over the asset's life.

- The last row shows the time-path of the revenue that the industry would have had to have earned over the period in order to have a zero 'excess return' in each year. In particular, in year 6 revenue (and hence prices) would have had to have been almost 60 per cent higher than under the Base Case in order to recover the tax payable on disposals in respect of that year, and then fall for the remainder of the period to approximately 15 per cent lower than under the Base Case (implying almost a 50 per cent fall in prices from year 6 to year 7).

56. An immediate implication of the above is that, if the effect of asset sales on taxation are to be considered, it is essential that the analysis of 'excess returns' consider both the adverse one-off taxation consequences of the asset sale, as well as the ongoing taxation benefits. In particular, focussing only on the increase in the tax depreciation deductions of the firm that purchases the asset – but ignoring the taxation that is paid by the firm that sells the asset on the profit that is made on the disposal will lead to the conclusion that the industry is making 'excess returns' – when in fact the converse has occurred.

57. A second and more important implication is that taking account of the taxation consequences of asset sales introduces 'lumpy' annual taxation effects, which in turn imply that the annual 'excess returns' observed in the year of the asset sale and thereafter will be materially misleading (at least in the absence of an adjustment, discussed below). Indeed, Professor Lally concedes as much in stating that:[27]

> [h]owever, any assessment of Excess Earnings at the end of year 1 would give rise to misleading conclusions

58. However, Professor Lally's comment understates the problem: if the tax consequences of asset sales are considered, the observed excess return in **all years** after the asset sale will be materially misleading. In addition, the lumpy taxation effects also imply that Lally's proposed approach is likely to be biased in favour of finding positive 'excess returns' precisely in situations when the industry had made inadequate returns. This bias arises because it is easy for historical, one-off events to be forgotten, but for the ongoing implications to be remembered – which, in this case, is equivalent to forgetting about the upfront tax paid on disposal, but remembering the ongoing higher tax depreciation allowances.

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[27] Lally 2004, p.7.

Remembering just the latter will increase the likelihood that excess returns had been made, whereas the asset sale should have reduced this likelihood.

59. Indeed, the Commerce Commission's proposal to take account of asset sales when deriving future tax depreciation allowances, but to ignore the implications of the same transactions for the tax paid on disposals, is an example of this bias.

60. The approach proposed by the Commerce Commission is equivalent to forming a view about the level of returns based on an examination of the results in years 6 through to 10 in the example above. This approach would lead to the conclusion that the industry is making an excess return, whereas in fact the industry had actually failed to make adequate returns. In terms of the principles set out by Professor Lally, the calculated 'excess return' would fail to 'reflect the underlying economic situation'.[28]

61. It was inappropriate for Professor Lally to recommend a methodology for computing tax depreciation allowances that creates large, lumpy taxation effects – and, thus leave the Commerce Commission exposed to forming views on the basis of materially misleading annual 'excess returns' – without also recommending an approach for smoothing out the lumpy taxation effects, and so permitting a view to be formed of the level 'excess returns' that properly reflects 'the underlying economic situation'.

62. The most appropriate method for smoothing out the one-off taxation implication of an asset sale is to spread the adverse upfront taxation amount over the remaining life of the assets in question. This would imply that the upfront adverse taxation effect (namely, the tax payable on the profit on sale of the asset) would be offset against the future positive effects when calculating annual 'excess returns'. In addition, as the time cost of money is relevant, the upfront taxation amount should be structured as an annuity. The resulting effect on the calculated excess returns is shown in Table 4 below.

TABLE 4
METHOD FOR SMOOTHING THE UPFRONT TAXATION EFFECTS

Year	6	7	8	9	10
Raw 'Excess Returns'	-1.85	0.46	0.46	0.46	0.46
Upfront Tax Effect	-2.31				
Upfront Tax Effect – Smoothed	-0.61	-0.61	-0.61	-0.61	-0.61
Ongoing Tax Effect	0.46	0.46	0.46	0.46	0.46
Smoothed 'Excess Returns'	-0.15	-0.15	-0.15	-0.15	-0.15

63. Calculating the annual 'excess returns' in this manner would lead to the conclusion that the asset sale had led to the industry failing to make a reasonable return – which is consistent with the results presented in Table 3. For this method to work, however, wherever a previous any asset sale is having an effect on

[28] Lally (2004), p.8.

ongoing tax depreciation allowances, the upfront (past) taxation consequences of that sale need to spread over the remaining life of the relevant assets.

64. An alternative approach would be to ignore the time cost of money, and merely spread the upfront profit on disposal over the remaining life of the relevant assets, and again act to offset the ongoing tax benefits of the sale. While ignoring the time cost of money would imply that the calculated 'excess returns' would understate the cost associated with the upfront taxation liability (and so overstate 'excess returns'), this bias would be small compared to the bias inherent in the Commerce Commission's proposed approach (that is, the bias that would result from ignoring the adverse taxation consequences of past asset sales).

65. The simplified approach described in paragraph 64 is mathematically equivalent to the other option of just ignoring the consequences of asset sales for future tax depreciation allowances. Under this option, the tax values of the assets that were used by the selling party would continue to be used to derive tax depreciation allowances (and 'excess returns') for the purchasing party, irrespective of any asset sales. This treatment of asset values for taxation purposes would mirror the Commerce Commission's proposal to ignore asset sales when deriving the asset values for the entities, and also mirror the approach taken by Australian regulators, such as the Victorian Essential Services Commission. Lastly, ignoring asset sales would also be consistent with what has become a fundamental principle of regulation in Australia, which is to ignore parties' financing decisions to the extent possible as discussed in paragraph 41.

66. The potential for the calculated 'excess returns' to provide materially misleading advice if asset sales are taken into account when deriving tax depreciation allowances, the objectives of simplicity and the desirability of ignoring parties' financing decisions to the extent possible provide powerful reasons for the Commerce Commission to ignore asset sales when deriving tax depreciation allowances for its 'excess return' calculations.

Conclusions

67. The Commerce Commission, acting on the advice of Professor Lally, has proposed using the sale price of the relevant entities to set those entities' opening taxation values, which affects the tax deemed to be payable by the entity and hence its calculated excess returns. While Lally has emphasised that the taxation payable across the whole of the industry should be considered (which includes the tax paid on disposal by the selling party), the Commission has proposed to ignore the tax paid on disposal for sale transactions that took place before its assessment period. The Commission's proposed approach raises two questions, which are:

    - Is the new regime that has been introduced in New Zealand so fundamental in nature that a new starting point for the opening tax values for the entities is required, and if so, how should that opening tax value to be determined?

    - If there is no rationale for setting a new opening tax value (or once a new opening tax value has been determined), is it appropriate to take account of asset sales over time when calculating tax depreciation allowances for the

purpose of deriving an estimate of ‘excess returns’, or would it be more appropriate to ignore those transactions when making such a calculation?

68. While the answer to the first question is probably ‘no’ for New Zealand, the decision of the Victorian Essential Services Commission in its 2001 review of the price controls for the privatised electricity distributors provides guidance on this matter. In that case, the reforms and restructuring of the industry were so fundamental that there was no practicable alternative to setting a new opening tax value. The businesses had been sold for above their regulatory values.

69. However, the Essential Services Commission concluded that it would be both inconsistent and unreasonable to adopt the purchase price of the businesses for setting the new opening tax value of the businesses (where the use of the higher purchase price value is detrimental to the businesses) but adopting the lower regulatory value for the businesses when calculating the businesses’ required returns and testing their financial viability (where the use of the lower regulatory value is detrimental to the businesses).

70. The same inconsistency would apply if the Commerce Commission was to use Powerco’s ODV to determine the return that it is allowed to earn before being judged to make ‘excess returns’, but to use the higher price it has paid to acquire its regulated business for the purpose of deriving tax depreciation allowances. Accordingly, even where the Commission considered that there was a justification for setting a new opening taxation value for the businesses, there are sound reasons for not setting this value in excess of the regulatory value (ODV) of the businesses.

71. The decisions of the Essential Services Commission (and the principles adopted by other Australian regulators) also provide guidance for determining whether asset sales should lead to a resetting of the taxation value of an entity where there was no justification for resetting this value (as well as for carrying a new value forward after it has been set).

72. A fundamental principle that Australian economic regulators have adopted is that regulated prices should be set independent of the regulated entities’ actual financing decisions to the extent possible (which includes the implications of asset sales). Setting prices independent of the entities’ actual financing decisions provides the entities with incentives to make efficient financing decisions, and shields customers from inefficient decisions. It also shields customers from paying higher prices as a result of transactions that benefit parties to the transaction, but not final customers. Ignoring financing decisions also implies that regulators are not required to form a view on the prudence of financing decisions, which they are not well positioned to make. Consistent with this, the Essential Services Commission has been careful to ignore the taxation implications of asset sales when calculating the taxation allowances in regulated prices, notwithstanding its detailed modelling of taxation issues.

73. The Commerce Commission should consider carefully the merits of assessing ‘excess returns’ in a manner that is independent of the entities’ financing decisions, and the protections to customers generally that such a principle provides. As noted above, most Australian regulators would consider it a matter of

course that the prices paid in asset sales should be ignored when setting regulated prices (or equivalently, assessing 'excess returns'), which implies ignoring all of the taxation consequences of asset sales when deriving tax depreciation allowances for regulatory purposes.

74. Notwithstanding the view above that the Commerce Commission should ignore the effect of asset sales as a matter of principle when calculating excess returns, I also have concerns about the specific method for dealing with these effects that has been proposed by Professor Lally.

75. Professor Lally's proposal to take account of the taxation consequences associated with asset sales when calculating 'excess returns' introduces 'lumpy' annual tax effects, and implies that the annual excess returns will paint a materially misleading picture of the 'the underlying economic situation' in all years after the sale. Indeed, as an asset sale results in an adverse taxation effect at the time of the sale but positive effects thereafter, Lally's proposal creates the risk that the upfront adverse consequences will be forgotten, and only the subsequent positive implications for returns observed. Indeed, this is the outcome of the Commerce Commission's proposed approach. In particular, the Commerce Commission has proposed to take account of past asset sales to impute a continuing tax benefit to the current asset owner, but to ignore the one-off upfront taxation liability of the selling party. The result is that a past asset sale will make it more likely that an entity will be assessed today as making 'excess returns', when the opposite should be the case. The Commission's proposed approach does not pass its adviser's own test of reflecting 'the underlying economic situation'.[29]

76. I consider that it was inappropriate for Professor Lally to recommend that the Commerce Commission take account of asset sales when deriving tax depreciation allowances (and hence excess returns), without also recommending to the Commission a method to deal with the lumpy annual tax effects this would introduce. Rather, Professor Lally's recommendation to take account of asset sales when calculating excess returns should have been accompanied with a recommended method to smooth out the one-off taxation consequences of asset sales, to ensure that the 'excess returns' calculated in the years subsequent to the asset sale do not give a materially misleading indication of the presence of 'excess returns'.

77. The most appropriate method of smoothing out the lumpy taxation effects is to spread the upfront adverse tax effect over the remaining life of the assets, using an annuity calculation. This would ensure that an asset sale would reduce the measured 'excess returns', consistent with the 'underlying economic situation'. However, a simplification to this correct method is to ignore the time value of money and just spread the upfront liability over the asset's remaining life. While this simpler approach is biased in favour of a finding of zero 'excess returns' when in fact the industry had made inadequate returns, the bias in the calculated annual 'excess returns' would be much lower than if asset sales were recognised but no attempt were made to smooth out the lumpy taxation effects. This simpler

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[29] Lally (2004), p.8.

method, in turn, is mathematically equivalent to an even simpler approach – which is to ignore the effect of asset sales on taxation liabilities completely when deriving ‘excess returns’.

78. Accordingly, the objectives of setting regulated prices (or equivalently, calculating ‘excess returns’) independently of actual financing decisions, consistency with regulatory decisions in Australia, simplicity and the imperative to ensure that the treatment of taxation should not lead to calculated ‘excess returns’ that are materially misleading all provide strong arguments to ignore asset sales when deriving tax depreciation allowances for the purpose of estimating ‘excess returns’. Moreover, such an approach would be consistent with ensuring that the measurement of excess returns reflects ‘the underlying economic situation’. The Commerce Commission’s proposed approach for deriving tax depreciation allowances when calculating ‘excess returns’ places excessive weight on a narrow principle of ensuring that an asset has a zero net present value – and ignores the wider set of factors that are relevant to this decision. A zero net present value rule cannot preserve investment incentives where it would deliver an outcome that is unreasonable, and other considerations like the incentives created for efficiency on the part of regulated entities are likewise important.

79. Overall, I consider the Commerce Commission’s proposed approach is contrary to regulatory best practice.

The Allen Consulting Group

Jeffrey Balchin
Director

Overview

Current Role

Jeff is a Director with The Allen Consulting Group. Jeff joined the firm in 1996, and has since built a consulting practice with a strong specialization in the economic regulation of price and service, with a particular emphasis on the application of incentive regulation to infrastructure and network industries.

Jeff has experience across the electricity, gas, rail, ports, water, telecommunications, post and banking industries. He has advised governments, regulators and major corporations on issues including regulatory price reviews, licensing and franchise bidding, market design, development of regulatory frameworks. Jeff has also undertaken work as an expert witness. His experience is outlined below in more detail.

Previous Experience in Government

Prior to joining the Allen Consulting Group, Jeff held a number of senior policy position in the Commonwealth Government.

Commonwealth representative on the secretariat of the Gas Reform Task Force (1995-1996) and played a lead role in the development of a National Code for third party access to gas transportation systems, with a particular focus on market regulation and pricing.

Senior Adviser, Infrastructure, Resources and Environment Division, Department of the Prime Minister and Cabinet (1994-1995). He played a key role in the creation of the Gas Reform Task Force (a body charged with implementing national gas reform that reports to the Heads of Government). During this time he also had responsibility for advising on primary industries, petroleum and mining industry issues, infrastructure issues, government business enterprise reform and privatisation issues.

Adviser, Structural Policy Division, Department of the Treasury (1992-94). Worked on environment policy issues in the lead up to the UN Conference on Environment and Development at Rio de Janeiro, as well as electricity and gas reform issues.

Education

Jeff undertook a B.Ec. (Hons.) at the University of Adelaide, for which he was awarded First Class Honours. He also was awarded the CEDA National Prize for Economic Development for his honours thesis.

Experience – Economic Regulation of Price and Service

A. Periodic Price Reviews – Major Roles for Regulators

Victorian Electricity Distribution Price Review (Client: the Essential Services Commission, Vic, 2003-current)

Providing advice to the Essential Service Commission on a range is economic issues related to its forthcoming review of electricity distribution charges, including finance and expenditure forecast issues and on the design of incentive arrangements.

Victorian Water Price Review (Client: the Essential Services Commission, Vic, 2003-current)

Providing advice to the Essential Services Commission on the issues associated with extending economic regulation to the various elements of the Victorian water sector.

ETSA Electricity Distribution Price Review (Client: the Essential Services Commission, SA, 2002-current)

Providing advice on the 'return on assets' issues associated with the review of ETSA's regulated distribution charges, including the preparation of consultation papers. The issues covered include the valuation of assets for regulatory purposes and cost of capital issues. Also engaged as a quality assurance adviser on other consultation papers produced as part of the price review.

Victorian Gas Distribution Price Review (Client: the Essential Services Commission, Vic, 2001-2002)

Economic adviser to the Essential Services Commission during its assessment of the price caps and other terms and conditions of access for the three Victorian gas distributors. Was responsible for all issues associated with capital financing (including analysis of the cost of capital and assessment of risk generally, and asset valuation), and supervised the financial modelling and derivation of regulated charges.

Also advised on a number of other issues, including the design of incentive arrangements, the form of regulation for extensions to unreticulated townships, and the principles for determining charges for new customers connecting to the system. Represented the Commission at numerous public forums during the course of the review, and was the principal author of the finance-related and other relevant sections of the four consultation papers and the draft and final decisions.

ETSA Electricity Distribution Price Review (Client: the South Australian Independent Industry Regulator, 2000-2001)

As part of a team, prepared a series of reports proposing a framework for the review. The particular focus was on the design of incentives to encourage cost reduction and service improvement, and how such incentives can assist the regulator to meet its statutory obligations. Currently retained to provide commentary on the consultation papers being produced by the regulator, including strategic or detailed advice as appropriate.

Dampier to Bunbury Natural Gas Pipeline Access Arrangement Review (Client: the Independent Gas Pipelines Access Regulator, WA, 2000-current)

Provided economic advice to the Office of the Independent Regulator during its continuing assessment of the regulated charges and other terms and conditions of access for the gas pipeline, including a review of all parts of the draft decision, with particular focus on the sections addressing the cost of capital (and assessment of risk generally), asset valuation and financial modelling. Represented the Office on these matters at a public forum, and provided strategic advice to the Independent Regulator on the draft decision.

Goldfield Gas Pipeline Access Arrangement Review (Client: the Independent Gas Pipelines Access Regulator, WA, 2000-current)

Provided economic advice to the Office of the Independent Regulator during its continuing assessment of the regulated charges and other terms and conditions of access for the gas pipeline, including a review of all parts of the draft decision, with particular focus on the sections addressing the cost of capital (and assessment of risk generally), asset valuation and financial modelling. Represented the Office on these matters at a public forum, and provided strategic advice to the Independent Regulator on the draft decision.

Victorian Electricity Distribution Price Review (Client: the Office of the Regulator-General, Vic, 1999-2000)

Economic adviser to the Office of the Regulator-General during its review of the price caps for the five Victorian electricity distributors. Had responsibility for all issues associated with capital financing, including analysis of the cost of capital (and assessment of risk generally) and asset valuation, and supervised the financial modelling and derivation of regulated charges. Also advised on a range of other issues, including the design of incentive regulation for cost reduction and service improvement, and the principles for determining charges for new customers connecting to the system. Represented the Office at numerous public forums during the course of the review, and was principal author of the finance-related sections of three consultation papers, and the finance-related sections of the draft and final decision documents.

Victorian Ports Corporation and Channels Authority Price Review (Client: the Office of the Regulator-General, Vic, 2000)

Advised on the finance-related issues (cost of capital and the assessment of risk generally, and asset valuation), financial modelling (and the derivation of regulated charges), and on the form of control set over prices. Principal author of the sections of the draft and final decision documents addressing the finance-related and price control issues.

AlintaGas Gas Distribution Access Arrangement Review (Client: the Independent Gas Pipelines Access Regulator, WA, 1999-2000)

Provided economic advice to the Office of the Independent Regulator during its assessment of the regulated charges and other terms and conditions of access for the gas pipeline. This advice included providing a report assessing the cost of capital associated with the regulated activities, overall review of all parts of the draft and final decisions, with particular focus on the sections addressing the cost of capital (and assessment of risk generally), asset valuation and financial modelling. Also provided strategic advice to the Independent Regulator on the draft and final decisions.

Parmelia Gas Pipeline Access Arrangement Review (Client: the Independent Gas Pipelines Access Regulator, WA, 1999-2000)

Provided economic advice to the Office of the Independent Regulator during its assessment of the regulated charges and other terms and conditions of access for the gas pipeline, including a review of all parts of the draft and final decisions, with particular focus on the sections addressing the cost of capital (and assessment of risk generally), asset valuation and financial modelling. Also provided strategic advice to the Independent Regulator on the draft and final decisions.

Victorian Gas Distribution Price Review (Client: the Office of the Regulator-General, Vic, 1998)

Economic adviser to the Office of the Regulator-General during its assessment of the price caps and other terms and conditions of access for the three Victorian gas distributors. Major issues addressed included the valuation of assets for regulatory purposes, cost of capital financing and financial modelling. Principal author of the draft and final decision documents.

B. Periodic Price Reviews – Other Activities

Principles for Determining Regulatory Depreciation Allowances (Client: the Independent Pricing and Regulatory Tribunal, NSW, 2003)

Prepared a report discussing the relevant economic and other principles for determining depreciation for the purpose of price regulation, and its application to electricity distribution. An important issue addressed was the distinction between accounting and regulatory (economic) objectives for depreciation.

Methodology for Updating the Regulatory Value of Electricity Transmission Assets (Client: the Australian Competition and Consumer Commission, 2003)

Prepared a report assessing the relative merits of two options for updating the regulatory value of electricity transmission assets at a price review - which are to reset the value at the estimated 'depreciated optimised replacement cost' value, or to take the previous regulatory value and deduct depreciation and add the capital expenditure undertaken during the intervening period (the 'rolling-forward' method). This paper was commissioned as part of the ACCC's review of its Draft Statement of Regulatory Principles for electricity transmission regulation.

Application of Murraylink for Regulated Status (Client: Murraylink Transmission Company, 2003)

Prepared advice on the economic issues associated with Murraylink Transmission Company's request to be converted from an unregulated (entrepreneurial) interconnector to a regulated interconnector. The key issues included the implications for economic efficiency flowing from its application, and the implications for the setting of the regulatory value for its asset.

Proxy Beta for Regulated Gas Transmission Activities (Client: the Australian Competition and Consumer Commission, 2002)

Prepared a report presenting the available empirical evidence on the 'beta' (which is a measure

of risk) of regulated gas transmission activities. This evidence included beta estimates for listed firms in Australia, as well as those from the United States, Canada and the United Kingdom. The report also included a discussion of empirical issues associated with estimating betas, and issues to be considered when using such estimates as an input into setting regulated charges.

Treatment of Working Capital when setting Regulated Charges (Client: the Australian Competition and Consumer Commission, 2002)

Prepared a report assessing whether it would be appropriate to include an explicit (additional) allowance in the benchmark revenue requirement in respect of working capital when setting regulated charges.

Pricing Principles for the South West Pipeline (Client: Esso Australia, 2001)

As part of a team, prepared a report (which was submitted to the Australian Competition and Consumer Commission) describing the pricing principles that should apply to the South West Pipeline (this pipeline was a new asset, linking the existing system to a new storage facility and additional gas producers).

Relevance of 'September 11' for the Risk Free Rate (Client: the Australian Competition and Consumer Commission, 2001)

Prepared a report assessing the relevance (if any) of the events of September 11 for the proxy 'risk free rate' that is included in the Capital Asset Pricing Model (this is a model, drawn from finance theory, for estimating the required return for a particular asset).

Victorian Government Review of Water Prices (Client: the Department of Natural Resources and the Environment, Vic, 2000-2001)

Prepared a report discussing the principles regulators use to determine the capital-related cost (including reasonable profit) associated with providing utility services, and how those principles would apply to the water industry in particular. The report also provided an estimate of the cost of capital (and assessment of risk in general) associated with providing water services. The findings of the report were presented to a forum of representatives of the Victorian water industry.

Likely Regulatory Outcome for the Price for Using a Port (Client: MIM, 2000)

Provided advice on the outcome that could be expected were the dispute over the price for the use of a major port to be resolved by an economic regulator. The main issue of contention was the valuation of the port assets (for regulatory purposes) given that the installed infrastructure was excess to requirements, and the mine had a short remaining life.

Relevance of 'Asymmetric Events' in the Setting of Regulated Charges (Client: TransGrid, 1999)

In conjunction with William M Mercer, prepared a report (which was submitted to the Australian Competition and Consumer Commission) discussing the relevance of downside (asymmetric) events when setting regulated charges, and quantifying the expected cost of those events.

C. Licencing / Franchise Bidding

Competitive Tender for Gas Distribution and Retail in Tasmania (Client: the Office of the Tasmanian Energy Regulator, 2001-2002)

Economic adviser to the Office during its continuing oversight of the use of a competitive tender process to select a gas distributor/retailer for Tasmania, and simultaneously to set the regulated charges for an initial period. The main issues concern how the tender rules, process and future regulatory framework should be designed to maximise the scope for 'competition for the market' to discipline the price and service offerings. Principal author of a number of sections of a consultation paper, and the regulator's first decision document.

Issuing of a Licence for Powercor Australia to Distribute Electricity in the Docklands (Client: the Office of the Regulator-General, Vic, 1999)

Economic adviser to the Office during its assessment of whether a second distribution licence should be awarded for electricity distribution in the Docklands area (a distribution licence for the area was already held by CitiPower, and at that time, no area in the state had multiple licensees). The main

issue concerned the scope for using 'competition for the market' to discipline the price and service offerings for an activity that would be a monopoly once the assets were installed. Contributed to a consultation paper, and was principal author of the draft and final decision documents.

D. Market Design

Review of the Victorian Gas Market (Client: the Australian Gas Users Group, 2000-2001)

As part of a team, reviewed the merits (or otherwise) of the Victorian gas market. The main issues of contention included the costs associated with operating a centralised market compared to the potential benefits, and the potential long term cost associated with having a non-commercial system operator.

Development of the Market and System Operation Rules for the Victorian Gas Market (Client: Gas and Fuel Corporation, 1996)

Assisted with the design of the 'market rules' for the Victorian gas market. The objective of the market rules was to create a spot-market for trading in gas during a particular day, and to use that market to facilitate the efficient operation of the system.

E. Development of Regulatory Frameworks

Advice on the ACCC Review of the Statement of Regulatory Principles for the Regulation of Transmission Revenues (Client: the Essential Services Commission, Vic, 2003-current)

Advising the Chair on the issues arising from the ACCC review, including on asset valuation and incentive regulation and finance-related issues.

Productivity Commission Review of the National Gas Code (Client: BHPBilliton, 2003-current)

Produced two submissions to the review, with the important issues including the appropriate form of regulation for the monopoly gas transmission assets (including the role of incentive regulation), the requirement for ring fencing arrangements, and the presentation of evidence on the impact of regulation on the industry since the introduction of the Code. The evidence presented included a detailed empirical study of the evidence provided by the market values of regulated entities for the question of whether regulators are setting prices that are too low.

Framework for the Regulation of Service Quality (Client: Western Power, 2002)

Prepared two reports advising on the framework for the regulation of product and service quality for electricity distribution, with a particular focus on the use of economic incentives to optimise quality and the implications for the coordination of service regulation coordinated with distribution tariff regulation.

Development of the National Third Party Access Code for Natural Gas Pipeline Systems Code (Client: commenced while a Commonwealth Public Servant, after 1996 the client was the Commonwealth Government, 1994-1997)

Was involved in the development of the Gas Code (which is the legal framework for the economic regulation of gas transmission and distribution systems) from the time of the agreement between governments to implement access regulation, through to the signing of the intergovernmental agreements and the passage of the relevant legislation by the State and Commonwealth parliaments.

Major issues of contention included the overall form of regulation to apply to the infrastructure (including the principles and processes for establishing whether an asset should be regulated), pricing principles (including the valuation of assets for regulatory purposes and the use of incentive regulation), ring fencing arrangements between monopoly and potentially contestable activities, and the disclosure of information. Was the principal author of numerous issues papers for the various government and industry working groups, public discussion papers, and sections of the Gas Code.

F. Other Finance Work

Review of Capital Structure (Client: major Victorian water entity, 2003)

Prepared a report (for the Board) advising on the optimal capital structure for a particular Victorian water entity. The report advised on the practical implications of the theory on optimal capital

structure, presented benchmarking results for comparable entities, and presented the results of detailed modelling of the risk implications of different capital structures. Important issues for the exercise were the implications of continued government ownership and the impending economic regulation by the Victorian Essential Services Commission for the choice of – and transition to – the optimal capital structure.

G. Expert Witness Roles

Duke Gas Pipeline (Qld) Access Arrangement Review – Appeal to the Federal Court (Client: the Australia Competition and Consumer Commission, 2002)

Prepared expert evidence on the question of whether concerns of economic efficiency are relevant to the non-price terms and conditions of access (note: the evidence was not filed as the appellant withdrew its evidence prior to the case being heard).

Victorian Electricity Distribution Price Review – Appeal to the ORG Appeal Panel: Rural Risk (Client: the Office of the Regulator-General, Vic, 2000)

Provided expert evidence (written and oral) to the ORG Appeal Panel on the question of whether the distribution of electricity in the predominantly rural areas carried greater risk than the distribution of electricity in the predominantly urban areas.

Victorian Electricity Distribution Price Review – Appeal to the ORG Appeal Panel: Inflation Risk (Client: the Office of the Regulator-General, Vic, 2000)

Provided expert evidence (written and oral) to the ORG Appeal Panel on the implications of inflation risk for the cost of capital associated with the distribution activities.

Major Coal Producers and Ports Corporation of Queensland Access Negotiation (Client: Pacific Coal, 1999)

Provided advice to the coal producers on the outcome that could be expected were the dispute over the price for the use of a major port to be resolved by an economic regulator. The main issues of contention were the valuation of the assets for regulatory purposes, whether the original users of the port should be given credit for the share of the infrastructure they financed, and the cost of capital (and assessment of risk generally). Presented the findings to a negotiation session between the parties.