

Network of Illawarra Consumers of Energy

**Impact of capitalisation practices on
benchmarking: observations**

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Glossary

AER	Australian Energy Regulator
DEA	Data Envelopment Analysis
DNSP	Distribution Network Service Provider
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NICE	Network of Illawarra Consumers of Energy
RAB Model	An approach to regulation first introduced by Ofwat in 1992 as a replacement for RPI-X to ensure Financial Capital Maintenance
RPI-X	Form of incentive regulation introduced in the UK as utilities were privatised
TFP	Total Factor Productivity, used to determine X in some versions of CPI-X or RPI-X price caps

Introduction

NICE

The Network of Illawarra Consumers of Energy (NICE) is a recently formed informal network advocating for the energy transition to a net-zero carbon future to be managed with the interests of consumers at heart.¹ This necessary transition needs to occur at least cost to consumers while maintaining reliability and security of energy services, appropriate consumer protections for essential services and a just transition for affected workforces.

We believe there is a role for regionally based advocacy within the context of nationally consistent energy policy. The choice and options for energy supply do differ by geographic region regarding different climatic conditions affecting demand and supply options and different risk factors impacting resilience planning. David Havyatt is the sole author of this submission.²

We appreciate the opportunity to comment on the Australian Energy Regulator's (AER) *How the AER will assess the impact of capitalisation differences on our benchmarking - Consultation paper* (the Paper) of November 2021. This submission has been subtitled 'observations' because we have not attempted to fully address all the issues raised in the Paper. We do, however, have a strong interest in the AER's use of benchmarking and its impact on the operation of the incentive regime.

AER's Preliminary Views

The AER conducts benchmarking studies on distribution and transmission businesses. Regulated businesses have expressed concern that differences in capitalisation approaches distort the benchmarking results.

The AER's preliminary view is that:

- *there is sufficient information to form a view that some DNSPs' capitalisation practices are materially different.*
- *differences in capitalisation practices can be considered a material factor in terms of their potential impact on the benchmarking results.*
- *applying an OEF adjustment to the benchmarking results, based on opex/capital ratios, best meets the principles proposed to be used to assess the options to address the impacts of these capitalisation differences on the benchmarking results.*

This Submission

The fact that DNSPs have written to the AER to highlight their concerns about the impact of differences in capitalisation practices is, as far as we are concerned, sufficient evidence that there

¹ The network has not yet started actively recruiting participants.

² Mr Havyatt was employed as Senior Economist at Energy Consumers Australia from October 2015 to August 2020. For the avoidance of doubt, nothing in this submission is the position of Energy Consumers Australia.

is a problem. However, we don't agree that the consequences of these differences are constrained to the benchmarking results, nor do we agree to the AER's proposed response.

In the next section of the submission, we review the historic approaches to regulation in the US, UK, and Australia. We observe that the UK model set out to be a lighter touch approach than the US and, consequently, did not include the same detail on regulatory accounting as occurred in the US. Noting that the starting point of the 'RAB model' or 'Building block model' is not materially different from the total revenue requirement processes in the US, we conclude that the best solution to inconsistent accounting approaches is mandated regulatory accounting standards. This conclusion applies to a wider set of considerations than just the capitalisation issue.

In the second section, we attempt to understand the nature of the AER's problem in more detail. Then, we develop a rule that can be used to develop accounting standards. In the final section, we consider the way the AER uses benchmarking and conclude that the benchmarks are being misused when used to specify whether a networks 'base' costs should be the starting point for estimation.

We would like to have commented further on the benchmarking approach. We note in our third section that the AER's benchmarking reports are relatively opaque and recommend that the AER address this issue.

Observations on the AER's Approach to Economic Regulation

Economic Regulation in Australia and the UK

Australia came late to the business of utility regulation. Historically most Australian utility investment was made by government, in most cases by a municipal government.³ Municipal or state governments slowly acquired the few private sector businesses through different phases of reform (Havyatt 2020).

In coming late to utility regulation, we closely followed similar developments in the UK. In some sectors, the UK experience was merely unpicking a wave of post-war nationalisation, which was not the Australian experience. The UK became famous for adopting the RPI-X approach of price cap regulation proposed by Stephen Littlechild for regulating the profits of British Telecom post-privatisation.

Littlechild's (1983) report to the Secretary of State is one of those much-cited but seldom read documents that work their way into the collective wisdom of the community of economic regulation practitioners.⁴ In it, Littlechild makes some significant observations. Paragraph 4.22 starts 'US experience of regulation is not encouraging, and suggests that regulation should not be too ambitious.' He continues, in part, 'In the USA regulators have been given ample powers to extract and analyse information, and considerable discretion in approving tariff structures and rates of return. The end-result has not been a reduction in monopoly power- in general, quite the opposite has happened. At the same time, investment has been distorted and efficiency and innovation discouraged.'

Against the backdrop of this jaundiced view of the US approach to utility regulation, Littlechild proposed five criteria for evaluating alternative regulatory schemes, being:

- a. Protection against monopoly, including preventing exploitation of consumers.
- b. Efficiency and innovation.
- c. Burden of regulation, including the extent and nature of information required to implement the scheme
- d. Promotion of competition
- e. Proceeds and prospects, including 'ensuring the maximisation of net proceeds from sale and facilitating the successful operation of BT' after privatisation.

³ The role of government in Australia is different to that in the UK and USA and has been shaped by our history and geography. As Quiggin (1996) notes there are three factors motivating this difference. The first is Australia's origins as a penal colony where almost by definition the whole society's needs were delivered by government. The second is Australia's (almost paradoxical) development of democratic government without revolution or force, and so government is not primarily seen as a power to be feared. The third has been the geographic consequence of a vast thinly populated land in which only government could raise the requisite finance for many projects. Note that in relation to the third, almost all the private sector electricity businesses raised their capital in the UK.

⁴ Stern (2003) states 'The 1983 Littlechild Report must be one of the most famous but least read economic papers.' The Australia wide catalogue Trove maintained by the National Library of Australia records only one copy, held by the Parliamentary Library in Canberra <https://trove.nla.gov.au/work/8999085>. The paper was reprinted as an appendix in (Bartle 2003) but that volume doesn't appear to be held in any Australian Library.

The model of simple price caps was first applied to other utilities, but beginning with water was replaced by the 'RAB model', which we know as the 'building block model', which is indistinguishable from US-style rate-of-return regulation with an institutionalised lag. Even the price rebalancing opportunity in price-cap theory is tempered by Tariff Structure Statements. Unsurprisingly, the 'light-handed' regulation expected by Littlechild rapidly gave way to increases in regulatory staff. As an example, Ofgem had 291 staff in 2003 while it had 729 ten years later (Stern 2014, p. 168)

The Reviled US Model of Economic Regulation

Economic regulation in the US started with the railroads. While regulation had the ostensible goal of protecting consumers from exploitation by monopolists, railroads embraced it as a means to eliminate 'destructive; competition (Kolko 1965). A core function for the Interstate Commerce Commission established for the regulatory task was the creation of a uniform accounting code for the railway industry.

The railway industry became an important arena for the standardisation of corporate accounting in the U. S., and railway accountants played a significant role in the federal government's earliest attempts to regulate large corporations. "The code was designed by the prominent economist and ICC statistician Henry Carter Adams to serve as a mechanism for the administrative supervision of railway corporations: a cognitive equivalent of a constitution" that would promote economic democracy by protecting the property rights of non-controlling stakeholders in the railway system: shippers who used the trains to send goods to markets, long-term investors in railway shares and bonds, consumers of shipped goods, and members of the communities that the railways connected and employed. Railway accountants working with Adams created the rules for answering potentially divisive questions of fact about who contributed how much to the assets and profits of the railway corporation, and thus provided moral justification for how claims on those assets and profits were distributed." (Kracman 2021)

The extension of regulation with the creation of Public Utility Commissions in Wisconsin and New York in 1907 was driven by the Progressive Party. The law in Wisconsin was drafted by a leading institutional economist, John Commons (Trebing 1987). Until the Wisconsin law, reasonable returns had been based on the return compared to stock valuation; the Wisconsin law focused on the physical valuation of the capital (Commons 1907). This, in turn, necessitated a focus on accounting procedures.

Accounting itself is the simple process of recording transactions and summarising those transactions. Some accounting principles, such as the double-entry system, merely ensure accuracy. In contrast, others, such as accrual accounting, seek to provide further insight into the business's financial affairs.⁵ Ball and Brown (1968) famously demonstrated empirically that accounting income numbers are helpful because they are related to stock prices but that markets also use other information sources. Accounting standards themselves are regularly changed, and

⁵ We are here primarily talking about financial accounting. Management accounting looks beyond the mere financial transactions to the drivers of the financial outcomes.

unsurprisingly the standard-setting process is affected by the same kind of influences that constitute regulatory capture in other industries.

Watts and Zimmerman (1979) describe the process as follows:

The link between suppliers of accounting theory and consumers goes further than mere quotation. Partners in accounting firms, bureaucrats in government agencies and corporate managers will seek out accounting researchers who have eloquently and consistently advocated a particular practice which happens to be in the practitioner's, bureaucrat's, or manager's self-interest and will appoint the researcher as a consultant, or expert witness, or commission him to conduct a study of that accounting problem. Consistency in the researcher's work allows the party commissioning the work to predict more accurately the ultimate conclusions. Thus, research and consulting funds will tend to flow to the most eloquent and consistent advocates of accounting practices where there are vested interests who benefit by the adoption or rejection of these accounting practices.

Cortese et al. (2010) provide a practical example of the process in a paper studying the International Financial Reporting Standards for the extractive industries, noting:

This paper illustrates the influence of powerful players in the setting of IFRS 6, a new International Financial Reporting Standard (IFRS) for the extractive industries. A critical investigative inquiry of the international accounting standard setting process, using Critical Discourse Analysis (CDA), reveals some of the key players, analyses the surrounding discourse and its implications, and assesses the outcomes. An analysis of small cross-section of comment letters submitted to the International Accounting Standards Committee (IASB) by one international accounting firm, one global mining corporation and one industry group reveal the hidden coalitions between powerful players. These coalitions indicate that the regulatory process of setting IFRS 6 has been captured by powerful extractive industries constituents so that it merely codifies existing industry practice.

In particular, Watts and Zimmerman (1979) note the issue of accounting for public utilities and how aligning regulatory accounts with statutory accounts works in the utilities' interests.

Since public utilities have incentives to propose accounting procedures for rate making purposes which increase the market value of the firm, their arguments are assisted if accounting standard-setting bodies such as the Financial Accounting Standards Board (FASB) mandate the same accounting procedures for financial reporting. Consequently, managers of utilities and other regulated industries (e.g., insurance, bank and transportation) lobby on accounting standards not only with their regulatory commissions but also with the Accounting Principles Board (APB) and the FASB.

Significant decisions are made in setting out financial accounts, and a common approach for the accounts issued to shareholders is a worthwhile goal. But the mistake in thinking that the accounting specified by the standards is the only way to view the firm has had recent disastrous consequences. A financial asset, such as a mortgage-backed security, can be valued based on its original cost, expected cash flows, or for how much the asset could now be sold. The latter, mark to market, was adopted by financial institutions before the Global Financial Crisis. This led management to erroneously believe that they were making huge profits on the assets (because a revaluation of an asset is accounted for as – effectively – negative depreciation). Only when the

crunch came, and they couldn't sell the assets at the price specified, did the realisation set in that these were incorrect valuations.⁶

An important feature of accounting systems is that once the transactions are captured, it is possible to sort them and summarise them in different ways. The expensive part of accounting is setting up the system (and audit), and setting it up to do two sets of accounts is easy. The expensive part comes when there are changes to the accounting standards.⁷

A cynic would argue that the purpose of changing the accounting standards is to generate more work for accountants. For example, recently, the accounting standards have implemented IFRS 16 lease standards in Australia. Leases were no longer considered operating expenses but instead are capitalised as a 'right of use asset' and then effectively depreciated (I think at least)⁸. This necessitated system changes in every company in Australia that had any kind of lease.⁹¹⁰

The Role of Accounting in Regulation

The US utility regulation model was grounded in standardised accounting frameworks for regulated utilities. The development of these frameworks was as political as all other aspects of regulation, including the use of 'experts' whose expertise is only developed by regularly taking payment from the utilities.

With its almost naïve faith in a light-handed approach, the UK and Australian model has not mandated a common accounting standard for regulatory accounts. Yet the regulatory framework itself is arguably no different now to US-style rate of return regulation.

When Australian utility regulators face problems created by inconsistent approaches to accounting by regulated businesses, they have no one to blame but themselves. The best solution is to mandate the accounting standard to be followed.

One example of this stands out, the difficulty created by the original decision to regulate Victorian DNSPs on a calendar year basis (we presume that suited the interests of parties to whom the Victorian Government was trying to sell them.) This creates difficulties for the regulator in comparing data submitted in response to Regulatory Information Notices (RIN).

⁶ Note that financial institutions normally run a risk adjusted balance sheet through an assets and liability committee, but that the increased complexity of derivatives were beyond the comprehension of management and board members on these committees.

⁷ When the author was head of regulatory at AAPT it was necessary to submit an eligible revenue return as the basis for calculating carrier licence fees. The first year was hard, but I established with the accounting team a chart of accounts that could be recut to present the eligible revenue return data with no drama at all.

⁸ See <https://www.bdo.com.au/en-au/accounting-news/accounting-news-february-2016/new-leases-standard>, <https://www.finance.gov.au/government/managing-commonwealth-resources/accounting-leases-rmg-110>

⁹ The big four offered the following advice <https://home.kpmg/au/en/home/insights/2017/04/aasb-16-leases-standard.html>, https://www.ey.com/en_gl/ifrs-technical-resources/a-closer-look-at-ifrs-16-leases-updated-december-2020, <https://www.pwc.com.au/publications/audit-risk-insights/leases-aasb16-oct18.html> and <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/audit/deloitte-au-audit-aasb-16-guide-220916.pdf>

¹⁰ Note that this issue of capitalisation of leases is not the same issue as a build/buy decision between applications in the cloud and applications on servers.

The author of this submission faced a similar challenge as the incoming Chair of the Glen St Theatre in Sydney. A theatre operating on a calendar year subscription season is best operated using calendar year accounts; that was the best managerial decision. However, the theatre was owned by Warringah Council, and our financial results had to be incorporated into Council accounts presented on a financial year basis. When I arrived, the theatre management ran two sets of accounts, with each transaction being posted twice. This was an inefficient approach, and Council's requirements (only for annual accounts) could be met simply by doing a full close every six months, including audit, and submitting to Council the summation of the two half (calendar) years that constituted a financial year. A decision to have six-monthly RINs would have solved part of the AER's information problem.

The Problem in Detail

Measuring Productivity and Efficiency

In the paper, the AER states:

We report annually on the productivity growth and efficiency of distribution network service providers (DNSPs), individually and for the industry as a whole, in the National Electricity Market (NEM).

Coelli et al. (1998, p. 3) note that the terms *productivity* and *efficiency* are often used interchangeably by commentators, but they are not precisely the same thing. The production frontier of any process is the maximum amount of output attainable from each input level; hence it reflects the current state of technology in an industry. Firms in the industry either operate on that frontier or beneath it. When they are on the frontier, they are technically efficient.

They then give a specific example of the two concepts and note that a firm may be technically efficient but may still be able to improve its productivity by exploiting scale economies. Given that increasing scale requires new investment, technical efficiency and productivity can be given short-run and long-run interpretations.

This discussion has been based only on quantities in the production technology. But we are also interested in production at least cost as well as technical efficiency. They refer to this (P.5) as allocative efficiency – choosing the least-cost combination of inputs to achieve a level of output (or also an efficient mix of outputs to produce).¹¹

They describe four major methods:

1. Least-squares econometric production models
2. Total factor productivity (TFP) indices
3. Data envelopment analysis (DEA)
4. Stochastic frontiers.

Methods 1 and 2 assume that all firms are technically efficient and provide measures of technical change and/or TFP. Methods 3 and 4 provide relative efficiency measures among firms; they do not assume that firms are technically efficient.

Differences in Capitalisation Practices

We have noted that accounting is the systematic collection, classification and aggregation of financial transactions. The most fundamental transaction is the payment of cash for goods or services. We shall, for the moment, ignore the fact that under accrual accounting, the transaction is first recorded when the goods or services are received rather than when they are paid for.

The most fundamental classification decision is whether the goods or services are fully consumed or rendered unusable in the current accounting period or not. That is the primary

¹¹ Note, this is a concept of allocative efficiency as it applies to the factor markets of inputs. In economic regulation when we talk of allocative efficiency we are usually talking about pricing equalling cost, and the allocative efficiency is about the consequences for the economy of that equivalence.

distinction between an operating and a capital expense. Capital accounting is basically used to spread the cost of the goods or services across the useful life of those goods and services to reflect the costs associated with relevant revenues more accurately.

In the Paper (P. 3), the AER gives two examples of what they describe as capitalisation practices. The first of these accords with the definition above. The second of these the AER describes as ‘opex/capital trade-offs,’ and give as an example a choice between buying a physical computer or renting space on cloud-based computing resources.

In considering the latter a ‘capitalisation practice,’ the AER might be mindful of the extent to which efficient capex/opex choices are an objective of the regime. Such choices abound, such as decisions about pole replacement policies to decisions about undergrounding cable. Indeed, the much-cited but poorly understood result of Averch and Johnson (1962) isn’t simply that networks will ‘gold plate’; it is that a profit maximising business with an allowed rate of return higher than its cost of capital will inefficiently substitute capital expenditure for operating expenditure.¹²

Approach in a regulatory accounting standard to capitalisation

The AER's example that accords with the accepted definition of capitalisation is the accounting treatment for overhead expenses for capital works. Overhead expenses are understood to mean those costs that are attributable to employing staff, including human resource function costs, supervision costs, office accommodation costs and costs of work tools. If the business employs two Full-Time Equivalent employees where one does maintenance and the other designs a new substation, the former's overhead costs are part of operating expenses.

The AER example suggests that some businesses classify the overhead cost for the latter as operating expense, while others capitalise it with the project. We suggest the appropriate accounting rule should be how those overhead costs would have been accounted for if the entire project had been outsourced. Clearly, the outsourced supplier will recover a share of their overhead costs in their price, and this would be capitalised with the project.

¹² All of the elements are important. Firms that have other objectives or that face lower allowed rates of return behave differently (Baumol & Klevorick 1970; Klevorick 1971). Klevorick (1971) notes that under strict conditions of allowed rate of return equalling the cost of capital the regulated business can be expected to choose a goal other than profit maximisation (absent regulatory lag). Aichian and Kessel (1962) assert that profit maximisation is the wrong measure for any manager, and that it should be substituted with utility maximisation. On this basis they conclude that the manager of the monopoly will fulfil the dictum proposed by Hicks (1935) that ‘the best of all monopoly profits is a quiet life.’

The AER's Benchmarking Approach

Opacity of the AER's Use of Benchmarking

The AER's 2021 benchmarking report (for distribution) makes several references to the way the benchmarks are conducted.¹³ Readers are directed to Appendix A for 'reference material about the development and application of our economic benchmarking techniques' (P.3). At various places, the report directs the reader to Appendix A for further clarification on how some part of the benchmarking framework was decided, sometimes including which specific report to consult¹⁴. Appendix A itself is headed 'References and further reading.'

While the AER is via this approach providing a complete record of how it (and Economic Insights) conduct the benchmarking, it is (like some of the rate of return work) an exercise in exploration to identify fully the techniques and reasoning employed.

This issue is further compounded by Economic Insights choice of software for undertaking the analysis. Shazam and STATA are both commercial products, potentially beyond the budget of stakeholders representing consumers. As a matter of principle, the AER should require consultants undertaking econometric or productivity studies to use the open-access R programming environment.

This opacity, we contend, is manifested in the low level of interest in the benchmarking reports by consumer advocates, despite their significance in revenue determinations (see P.6 of the Paper). We have endeavoured to understand the historic decisions that underpin the AER's benchmarking reports. However, we believe the AER and its consultants can and should do more to facilitate an understanding of the benchmarking approach.

We further note that the relationship between the Economic Insights report and the AER benchmarking report could be clearer. In particular, we note that in the AER's report, charts sourced from the EI report are not identified with the relevant figure number from the EI report (as an example, Figure 5 in the AER report is Figure 2.1 in the EI report, but is only labelled Source: Economic Insights.)

It is also unclear why so much of the analysis included in the EI report is not included in the AER report. As one example, an initial interpretation of Figure 2.2 in the EI report shows underground distribution cables PFP was 30.5 per cent lower in 2020 than in 2006, and underground sub-transmission PFP declined by 17.8 per cent over this period. The EI report notes this is because underground cables have increased rapidly from a small base, which if valid, simply indicates that the PFP measures aren't telling us anything actionable.

The AER's Use of Benchmarking

The AER's annual benchmarking report (for distribution) uses three types of techniques.

¹³ <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/annual-benchmarking-reports-2021>

¹⁴ The addition at least of reference to the relevant pages in these reports would be worthwhile.

- Productivity index numbers (PIN).
Used to measure the productivity performance of individual DNSPs in the NEM are multilateral total factor productivity (MTFP) and multilateral partial factor productivity (MPFP). The indexes allow comparisons of absolute levels and growth rates of the measured productivity.
- Econometric operating expenditure (opex) cost function models.
These also examine the productivity of opex in isolation.
- Partial performance indicators (PPIs).
These techniques, also partial efficiency measures, relate one input to one output.

The confusion between efficiency and productivity pervades the AER's discussion. For example, the AER describes the use of the tools 'to test whether DNSPs have been operating efficiently.' (P.2)

The following paragraph provides details on the AER's use of benchmarking in revenue determinations:

This is particularly relevant for examining the opex costs revealed in the most recent years prior to DNSPs' revenue determination processes. Where a DNSP is responsive to the financial incentives under the regulatory framework to make cost reductions, and retain the gains for a period (5 years), actual opex should provide a good estimate of the efficient costs required to operate in a safe and reliable manner and meet relevant regulatory obligations. The benchmarking analysis allows us to test this assumption.

This is instructive of the AER's interpretation of the purpose of incentive regulation as a cost revelation tool, whereas incentives are primarily focussed on encouraging cost reduction effort.¹⁵ The actual costs revealed are certainly more efficient costs than in the prior period but are by no means the efficient costs. Instead, they represent the level of costs subject to the level of effort invoked by the incentive.

The AER goes further though and considers the rate of productivity improvement to be something that should continue as if it is a set of cost declines independent of the effort exerted by management. This is an erroneous assumption.

The AER's Economic Regulatory Function

The AER also misrepresents how an incentive regulatory regime operates. It states that "The AER determines the revenues that an efficient and prudent network business require at the start of each five-year regulatory period." This is technically incorrect.

The AER is given economic regulatory functions and powers in s15(1)(f) of the NEL. The way the AER is to exercise these powers is then specified by s16, which includes four major components; contribute to the achievement of the NEO (subsection (1)(a)), provide a

¹⁵ Note also that through the operation of the EBSS networks obtain six years of benefit from cost reductions, not the five years suggested here.

consultation process (subsection (1)(b)), and make constituent decisions (subsection (1)(c)) and have regard to the revenue and pricing principles (subsection (2)).

The primacy of the NEO guarantees that the AER has to have regard to price along with all the other factors that, collectively, can be considered a quality vector. The way of contributing to the NEO then has regard to the revenue and pricing principles which are set out in s7, as

- (1) The revenue and pricing principles are the principles set out in subsections (2) to (7).*
- (2) A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in—*
 - (a) providing direct control network services; and*
 - (b) complying with a regulatory obligation or requirement or making a regulatory payment.*
- (3) A regulated network service provider should be provided with effective incentives in order to promote economic efficiency with respect to direct control network services the operator provides. The economic efficiency that should be promoted includes—*
 - (a) efficient investment in a distribution system or transmission system with which the operator provides direct control network services; and*
 - (b) the efficient provision of electricity network services; and*
 - (c) the efficient use of the distribution system or transmission system with which the operator provides direct control network services.*
- (4) Regard should be had to the regulatory asset base with respect to a distribution system or transmission system adopted—*
 - (a) in any previous*
 - (i) as the case requires, distribution determination or transmission determination; or*
 - (ii) determination or decision under the National Electricity Code or jurisdictional electricity legislation regulating the revenue earned, or prices charged, by a person providing services by means of that distribution system or transmission system; or*
 - (b) in the Rules.*
- (5) A price or charge for the provision of a direct control network service should allow for a return commensurate with the regulatory and commercial risks involved in providing the direct control network service to which that price or charge relates.*
- (6) Regard should be had to the economic costs and risks of the potential for under and over investment by a regulated network service provider in, as the case requires, a distribution system or transmission system with which the operator provides direct control network services.*
- (7) Regard should be had to the economic costs and risks of the potential for under and over utilisation of a distribution system or transmission system with which a regulated network service provider provides direct control network services.*

The first of these principles is only that an operator can recover ‘at least’ its efficient costs. The second is that the operator should be incentivised to promote efficiency. The AER’s economic regulatory functions and powers are otherwise detailed in the Rules. In particular, concerning costs, the NER states as follows (NER 6.5.6(c)/6.5.7(c)(1):

The AER must accept the forecast of required <operating/capital> expenditure of a Distribution Network Service Provider that is included in a building block proposal if the AER is satisfied that the total of the forecast operating expenditure for the regulatory control period reasonably reflects each of the following (the <operating/capital> expenditure criteria):

- (1) the efficient costs of achieving the <operating/capital> expenditure objectives; and*
- (2) the costs that a prudent operator would require to achieve the <operating/capital> expenditure objectives; and*
- (3) a realistic expectation of the demand forecast and cost inputs required to achieve the <operating/capital> expenditure objectives.*

In a piece of delightfully unnecessary duplication, the two sets of objectives are also the same (NER 6.5.6(a)/6.5.7(a))

A building block proposal must include the total forecast <operating/capital> expenditure for the relevant regulatory control period which the Distribution Network Service Provider considers is required in order to achieve each of the following (the <operating/capital> expenditure objectives):

- (1) meet or manage the expected demand for standard control services over that period;*
- (2) comply with all applicable regulatory obligations or requirements associated with the provision of standard control services;*
- (3) to the extent that there is no applicable regulatory obligation or requirement in relation to:
 - (i) the quality, reliability or security of supply of standard control services; or*
 - (ii) the reliability or security of the distribution system through the supply of standard control services,*to the relevant extent:
 - (iii) maintain the quality, reliability and security of supply of standard control services; and*
 - (iv) maintain the reliability and security of the distribution system through the supply of standard control services; and**
- (4) maintain the safety of the distribution system through the supply of standard control services.*

Nothing in these clauses requires the AER to allow ‘no more than’ the costs an efficient and prudent network business requires, only that they be no less than that level of costs. The law is clear that the AER must provide incentives to promote efficiency.¹⁶

Overall, our view is that the primary purpose of benchmarking should be the calibration of incentives rather than attempting to estimate the efficient costs of a network after applying cost reduction effort.

¹⁶ It can be argued that only allowing costs that were below the operator’s current costs on the grounds that the lower costs are efficient is to deny the operator an ‘incentive’ to promote efficiency.

Compounding estimation

The approach to benchmarking relies on the outcomes from other AER estimates and calculations. These are:

1. The calculation of an input price index to deal with input costs in ‘real’ terms.
2. The use of the value of customer reliability to turn reliability outcomes into dollar values
3. The use of the allowed rate of return together with depreciation to convert capital stocks into an annual flow
4. The allocation of revenue against categories of output.

We submit that this process of layering estimation on estimation renders the benchmarks unreliable.

We are also unsure how the benchmarking reports may or may not be related to the distribution network performance reports. However, there is presumably some relationship between the two because both deal with the inputs-outputs-outcomes structure of the businesses.

Conclusion

The problems the AER is experiencing with capitalisation reflects two separate issues. The first is the failure of the AER to put in place satisfactory regulatory accounting rules. The second reflects the use to which the AER is putting benchmarking.

We regret that it has been necessary, due to time constraints, to truncate further consideration of the changes we would propose to the AER's use of benchmarking in this submission. However, we do not believe the solution lies in adding additional Independent Environment Factors.

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