Network of Illawarra Consumers of Energy

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AER Review of Expenditure Incentives - Submission

March 2022

Contents

Glossary

AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
CESS	Capital Efficiency Sharing Scheme
CPI-X	Australian implementation of the UK RPI-X regulatory framework
CSIS	Customer Service Incentive Scheme
DER	Distributed Energy Resources which includes generation, storage and loads that can respond to price or non-price signals.
DNSP	Distribution Network Service Provider
EBSS	Efficiency Benefit Sharing Scheme
ESM	Efficiency Sharing Mechanism – a component of PBR
HPUC	Hawaii Public Utilities Commission
ICT	Information and Communications Technology
MRP	Multi-Year Rate Plan
NER	National Electricity Rules
NICE	Network of Illawarra Consumers of Energy
PBR	Performance Based Regulation
PIM	Performance Incentive Mechanism – a component of PBR
RAB	Regulatory Asset Base
STPIS	Service Target Performance Incentive Scheme

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 a nationally consistent energy policy. The choice and options for energy supply differ by geographic region because of different climatic conditions affecting demand and supply options and different risk factors impacting resilience planning. David Havyatt, the sole author, has prepared this submission.[2]

This Submission

We appreciate the opportunity to comment on the Australian Energy Regulator's (AER) *Review of Expenditure Incentive Schemes Discussion Paper* (the Paper). This submission follows a preliminary submission[3] that placed the Paper in a broader context. It raised four critical issues:

1. It made a case for adopting the term 'Performance-Based Regulation' (PBR) for the Australian regime rather than 'incentive regulation.' This is not only a more accurate descriptor but also places our regime at the forefront of current regulatory thinking. This framing emphasises the consumer outcomes of regulatory decisions rather than the relevant inputs.
2. The need to distinguish between a description of the objective of economic regulation as mimicking the outcomes of competitive processes and the alternative of mimicking the competitive process itself. The former has the unfortunate consequence of setting regulation up to fail when contrasted with the largely mythical outcomes expected of competition at equilibrium in orthodox economics.
3. It observed that efficiency gains are not 'costless'; they all require managerial effort and action, and
4. It noted that management also has incomplete information (more accurately, knowledge) about the cost reduction opportunities available.

We accept that the AER is conducting this review within the constraints of the current Rules, while our preliminary submission focuses on the value of reconsidering the Rules. We most recently noted the inputs orientation of the Rules in our submission in response to a consultation

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[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.
[3] https://d3n8a8pro7vhmx.cloudfront.net/nice/pages/21/attachments/original/1644027644/NICE_Preliminary_Submission_on_AER's_Review_of_Expenditure_Incentives.pdf?1644027644

by six Distribution Network Service Providers (DNSPs) on how they can help communities adapt to climate change.[4]

In this submission, we focus exclusively on applying the schemes to electricity distribution networks. This emphasis is due to the greater contribution of distribution costs in retail prices than transmission network costs. It is further warranted by the parlous state of transmission economic regulation for dealing with a new wave of investment. We similarly believe that there are far more significant issues about the economic regulation of gas networks.

Following this introduction, there is a short discussion on the context in which the Paper has been prepared. Following that, we attempt to respond to all the AER's consultation questions.

Any questions relating to this submission should be directed to David Havyatt at eo@nice.org.au.

[4] https://assets.nationbuilder.com/nice/pages/21/attachments/original/1646981733/NICE_Submission_to_Endeavour_Energy_et_al_on_Resilience.pdf?1646981733

Context

Focus on outcomes

Our preliminary submission noted that the Australian regulatory regime is already more correctly described as Performance-Based Regulation (PBR) rather than incentive regulation. However, our purpose is to highlight the distinction between the incentive mechanisms that apply – the incentive provided by a Multi-Year Rate Plan (MRP), the mechanism for sharing the benefit of that incentive Efficiency Sharing Mechanisms (ESMs) and other Performance Incentive Mechanisms (PIMs).

In the Australian context, the Efficiency Benefit Sharing Scheme (EBSS) and the Capital Efficiency Sharing Scheme (CESS) are forms of ESM. The Service Target Performance Improvement Scheme (STPIS) and the Customer Service Improvement Scheme (CSIS) are types of PIM.

Historically, simple PIMs were implemented in regulatory regimes as recognition that simple price or revenue cap regulation provides an incentive to reduce costs at the expense of quality. Simple quality mandates can at best create a quality floor, but they can also prove hard to enforce. In a rapidly changing energy system, the PBR framework is better suited to achieving regulatory objectives than the simpler cost of service or incentive regimes.[5]

An example of the ability of PBR to consider changing outcomes is provided in the table below taken from the Hawaii Public Utilities Commission (HPUC) staff paper on PBR.[6]

[5] Lowry, MN & Woolf, T 2016, *Performance-Based Regulation In A High Distributed Energy Resources Future*. https://www.synapse-energy.com/sites/default/files/performance-based-reg-high-der-future.pdf

[6] HPUC 2019, *Staff Proposal for Updated Performance-Based Regulations*, Hawaii Public Utilities Commission https://puc.hawaii.gov/wp-content/uploads/2019/02/2018-0088-PBR-Staff-Proposal.pdf

Regulatory Goal	Regulatory Outcome	
Enhance Customer Experience	Traditional	Affordability
		Reliability
	Emergent	Interconnection Experience
		Customer Engagement
Improve Utility Performance	Traditional	Cost Control
	Emergent	DER Asset Effectiveness
		Grid Investment Efficiency
Advance Societal Outcomes	Traditional	Capital Formation
		Customer Equity
	Emergent	GHG Reduction
		Electrification of Transportation
		Resilience

The Rules Requirements and the CESS

For convenience, the Rules under Chapter 6 of the National Electricity Rules (NER) as they relate to the expenditure incentive schemes have been included in Appendix 1. The extract is not necessarily complete, as no effort has been made to include the definitions of relevant defined terms.

However, the Rules are not only excessively focused on the inputs, but they are also complex. A particular issue is whether the objective for the AER in making revenue determinations should be focussed merely on the additional capital expenditure in the revenue proposal or whether it should consider that expenditure in the context of the overall asset base through time.

Trying to interpret the Rules is a challenge. The Rules include the following three defined terms:

capital expenditure objectives (NER 6.5.7(a)

(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.

capital expenditure criteria (NER 6.5.7(c)(1)[7])

(i) the efficient costs of achieving the capital expenditure objectives;

(ii) the costs that a prudent operator would require to achieve the capital expenditure objectives; and

(iii) a realistic expectation of the demand forecast and cost inputs required to achieve the capital expenditure objectives.

capital expenditure incentive objective (NER 6.4A(a))

(a) The capital expenditure incentive objective is to ensure that, where the value of a regulatory asset base is subject to adjustment in accordance with the Rules, then the only capital expenditure that is included in an adjustment that increases the value of that regulatory asset base is capital expenditure that reasonably reflects the capital expenditure criteria.

These definitions alone reveal serious weaknesses in the regulatory regime. Firstly, the capex objectives give primacy to service standards set by regulation, or otherwise only the maintenance of existing standards. The quality of service standards are thus either set irrespective of cost (by regulation) or must be maintained. As a result, consumers don't have the opportunity to decide they are prepared to accept lower standards for cheaper service or the reverse.

Secondly, the definition of capital expenditure incentive objective is difficult to interpret at best and at worst is meaningless. It is not clear how an incentive objective is specified in terms of how capex can be added to the Regulatory Asset Base (RAB).

Thirdly the terms 'prudent' and 'efficient' are used without definition, as indeed is capital expenditure. However, for clarity, we assume the following definitions:

1. Capital expenditure. Expenditure incurred by the DNSP that is used to provide services to consumers beyond the current regulatory period.
2. Prudent. Prudent expenditure is expenditure on capabilities (the whole project represented by the capital expenditure) that promotes the achievement of the National Electricity Objective to the greatest degree. We equate the latter with promoting the long-term interest of consumers; that is, it ensures that current and future consumers pay no more than they need to for the quality of service they require.

[7] The definition in Chapter 10 specifies the *capital expenditure objectives* as being the matters listed in clause 6.5.7(c)(1)–(3), however, the construction of 6.5.7(c) makes it clear that the objectives are actually 6.5.7(c)(1)(i)-(iii)

3. Efficient expenditure. Expenditure is (technically) efficient if it delivers the required capabilities at least cost to consumers.

These definitions, in turn, eventually feed into the Rules allowing the AER to include a *Capital Expenditure Sharing Scheme* (NER 6.5.8A) (see Appendix A). The first observation is that this Rule **does not** require there to be a CESS; it merely allows the AER to develop one (sub-clauses (a) and (b)).

The Rules require the AER only to consider capital expenditure efficiency (sub-clause (c)). The AER apparently believes it is only charged with considering the efficiency of new capital expenditure. Under our definition above, the required capability is delivered as cheaply as possible considering all the employed assets. While we accept this is the AER's task **if** it has a CESS, we do not agree that it is the AER's primary regulatory objective.

We contend that the AER's task is to consider the prudence and efficiency of all capital expenditure over time (including the future). Our reasoning is simply that no single asset determines the achievement of the NEO for an individual consumer, let alone consumers generally; that is, new or replacement assets can only be valued in the context of the existing assets. Hence, the efficiency of an ICT solution that enabled more dynamic management of Distributed Energy Resources (DER) that increased the overall efficiency of the network needs to be assessed on the basis that it best meets the first of the capital expenditure criteria.

Consequently, we maintain the position advanced in the preliminary submission; the AER should abandon the CESS and instead focus on the overall efficiency of the network assets. To ensure that the network provides the required capability at least cost then only requires that the excess returns that could be delivered from a dollar of unnecessary capital expenditure (i.e. $1 times the difference between the DNSPs actual cost of capital and the allowed cost of capital) is less than the return that the network can earn from an incentive focussed only on the ratio of outputs to total assets employed.

Consultation Questions

Questions - Page 17

1. Have we captured the key stakeholder issues?

This is a difficult question to interpret and hence answer. We assume the AER is referring to the following observations in The Paper. We agree that they are all relevant stakeholder issues, and provide comments on each below. Following these comments, we discuss the question of completeness.

We are interested in stakeholders' views on whether we have the correct balance between the EBSS and our economic benchmarking. That is, does our application of both tools provide networks a constant incentive to reduce operating expenditure to the efficient level? (P. 13)

The application of both tools does provide a constant incentive, however, the same outcome can be effectively achieved by simply using the average of five years of opex as the base rather than a single year. This approach ensures the same constant incentive without requiring the machinery of the EBSS.[8]

However, there remain concerns from stakeholders, such as from observed patterns of underspending and over-forecasting of capital expenditure. Stakeholders questioned whether CESS rewards are commensurate with efficiency gains in this context and whether we are identifying all capital expenditure deferrals, as well as other drivers of expenditure. (P.14)

Almost definitionally, the CESS is not rewarding efficiency gains; it only rewards over-forecasting by the DNSP or insufficient oversight by the AER in determining allowed capital expenditure. We understand that the AER is trying to calibrate the capital expenditure allowed by using previous period results (i.e. you underspent a lot last period, if you do it again, you are just over-forecasting). However, this approach simply penalises a DNSP that can obtain continuous cost improvement through the consistent application of effort.

In this review, we will consider how our approach to forecasting provides the appropriate conditions for generating expenditure forecasts that reflect efficient costs. (P.14)

We have explained in our preliminary submission this problem of framing forecasts, noting that it is inconsistent to imagine revenue determinations are based on efficient costs but that DNSPs still have the opportunity to earn an incentive by reducing costs below efficient costs. This is why regulators and other stakeholders need to engage with the theory and understand the regulator's two-fold information problem; they do not know the firm's cost type nor how much effort management has put in or will put into cost reduction.[9]

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[8] Biggar, D 2004, '*Incentive regulation and the building block model*', paper presented to Australian Conference of Economists, Sydney, Australia, https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ACE2004&paper_id=133.

[9] An easily accessible version is found in Joskow, PL 2014, 'Incentive Regulation in Theory and Practice: Electricity Distribution and Transmnission Networks', in NL Rose (ed.), *Economic Regulation and Its Reform: What Have We*

The first information issue has two elements. The first is whether different networks are of different types so that efficiency 'looks different' between them. The second is how close the firm is to its own efficiency frontier.[10]

We view that the current way of forecasting is inappropriate and that the average of the last five years Opex should always be accepted as the base. A zero trend adjustment should be applied for the most efficient firms, and greater negative trends applied for less efficient firms. This approach removes the need for the EBSS.

The current analysis suggests that the expenditure schemes do not currently provide equal rewards and penalties. This is due to differences in how the EBSS and CESS are designed, and changes in economic conditions over the past 5 years. (P.14)

There is no reason why the EBSS and CESS should have the same strength. By their recurrent nature, one would expect that it requires more effort to achieve a given proportional reduction in operating expense than a capital expense. Indeed, as we explained in our preliminary submission, the strength of the opex incentive should not be the same for all firms.

The application of incentive schemes should be flexible in response to network service provider performance and whether they appropriately respond to incentives or require incentivising.

Several consumer stakeholders have raised concerns about expenditure over-forecasting and whether network service providers are being rewarded for genuine efficiency gains. We have also heard that an incentive scheme should not apply unless we can confidently correct for expenditure over-forecasting (specifically for capital expenditure forecasting and the CESS).

We currently decide whether to apply an incentive scheme to a network service provider as part of their revenue determination. When we decided to apply an incentive scheme, our current approach is to apply the same version of an incentive scheme to each network service provider.

However, a more flexible approach can be applied. When the Australian Energy Market Commission (AEMC) made the rule change that required the AER to establish the CESS, it contemplated that the AER could tailor incentive scheme rewards and penalties to service providers based on their historical spending behaviour and how they are responding to incentives. (P.15)

Learned? (Conference held on 9-10 September 2005), University of Chicago Press. Section 2 of the Chapter provides a concise and readable summary of the theory. It is available online at https://www.nber.org/system/files/chapters/c12566/c12566.pdf

[10] The two core references here are Farrell on the concept of measuring productive efficiency and Charnes et al on techniques.

Farrell, MJ 1957, 'The measurement of productive efficiency', *Journal of the Royal Statistical Society: Series A (General)*, vol. 120, no. 3, pp. 253-81.

Charnes, A, Cooper, W, Lewin, AY & Seiford, LM 1997, 'Data envelopment analysis theory, methodology and applications', Journal of the Operational Research society, vol. 48, no. 3, pp. 332-3.

The Rule, on our reading above, does not require the AER to introduce a CESS.

Overall, the AER addresses the right stakeholder issues as far as the Rules allow. However, we would frame them differently. The fundamental question is whether the incentive schemes effectively invoke the optimum level of cost reduction effort by management. That implies that the amount awarded to firms is no more than necessary to achieve the cost reduction.

2. Do you agree with our intention to prioritise a review of the expenditure incentive schemes and customer outcomes?

We would prefer that the AER first adopt Performance Based Regulation's language. Given that the review is limited to not including possible Rule changes, we think the priority on the expenditure incentives is appropriate.

It is important at the outset to recognise the primary 'expenditure incentive scheme' is the use of a multi-year rate plan. In the language of PBR, the EBSS and CESS are simply Efficiency Sharing Mechanisms. The effect of the EBSS is to ensure that the benefits of an efficiency improvement are shared in the same ratio between consumers and networks irrespective of the year in which they occurred.

3. What deliverables should we prioritise as part of this review?

Improving the targeting of incentives on invoking effort rather than merely a reward for cost reduction that may be more reflective of forecasting error (in capex).

4. Do you agree with our key areas of focus? Our proposed key focus areas are:

- Better information and monitoring of incentive schemes costs and outcomes over time.
- The interaction between incentive schemes and forecasting.
- The balance of incentive scheme rewards and penalties.
- Linking incentive schemes to network service provider performance.

Yes

5. Are there other key issues we should consider as part of this review?

Yes, the AER should identify any part of the Rules impeding good incentive design.

Questions – Page 30

6. Do stakeholders agree that the incentive framework improves outcomes for customers of electricity services?

Yes, but not by the degree that Energy Networks Australia has claimed in the report Consumer benefits resulting from the AER's incentive schemes *prepared for them by HoustonKemp*[11]*. It is embarrassing that the organisation and its consultants buy into the fiction that a set of benefits*

[11] https://www.energynetworks.com.au/resources/reports/2022-reports-and-publications/consumer-benefits-resulting-from-the-aers-incentive-schemes/

stretching out to infinity can be even assumed to be benefits that consumers will receive. It is more than embarrassing to claim that consumers have already received these benefits.

7. Is the size of incentive payments appropriate and commensurate with the outcomes being provided to customers?

No. The operation of the EBSS means that networks get all their share upfront and that consumers have to wait for any benefits till the networks have got all of theirs.

Questions – Page 39

8. Does the current approach to financial incentives remain appropriate?

No. They should not be symmetrical; networks should share a much higher proportion of expense over-runs.

9. Are the current *levels* of financial rewards and penalties appropriate?

- Should the rewards and penalty rates be lower or higher?
- Should the relative rewards and penalties under the EBSS and CESS be fixed, or should it vary with the time value of money?

In our preferred model, the rewards should vary with the time value of money because the underlying principle is simply that the network gets to retain six years worth of an Opex saving. The 30% at 6% was only ever a way to try to convince consumers that they were benefitting; it was never a design element. This is the simplest way to provide for a continuous incentive and should be retained, though it should be achieved by using the average cost of the last five years as the base rather than the fourth year, in which case there is no need for the EBSS.

10. Is the balance of incentives between the schemes important?

- Are there circumstances where different rewards and penalties between operating and capital expenditure appropriate?
- How should financial incentives be considered taking into account potential non-financial incentives on network service providers?

The answer to this question necessarily entails a conversation about the allowed rate of return. The allowed rate of return specifies the marginal value of capex/opex substitution. The infamous Averch-Johnson effect is merely that a profit maximising firm subject to rate of return regulation with a real cost of capital higher than the allowed rate of return will inefficiently substitute capex for opex. This motivation equally applies to the question of the effort that will be applied in realising cost savings.

A similar issue arises concerning the relationship between the allowed rate of return and incentives. The theory of capital pricing is all based on the assumption that the unknown future cash flows are normally distributed. If the incentives have a bias (which they clearly do) to be more often in the money than not, it means the cashflows aren't normally distributed or that the mean of the cashflows has increased. If the

mean of the cashflows increase but the variance doesn't, then the risk weighting of the asset should decrease. But the process of setting the allowed rate of return doesn't consider the impact of the incentive schemes.

An alternative construction, which we favour, is to intentionally set the allowed rate of return slightly lower than the best estimate of the required rate of return, but designing all the incentive schemes (that is, EBSS and the PIMs) to only provide positive returns to the network.

11. To what extent is expenditure forecasting a concern for stakeholders?

Expenditure forecasting is a huge concern. If we thought Government employees could better forecast expenditure than private-sector ones, we would have retained the networks in government ownership. The intent of simple price caps as a regulatory tool was to keep the regulator out of estimating efficient expenditure and instead use the power of financial incentives to have the regulated business drive its costs down.

12. To what extent would providing greater flexibility in the approach to applying incentive schemes address stakeholder concerns about the incentives on network service providers to over-forecast?

The simplest way to remove the incentive to over-forecast is to remove all benefits from over-forecasting. Capex should only work into the regulatory scheme at realised cost. The incentive for capital efficiency should be an outcome incentive based on the ratio of outputs to the total asset value.

Questions – Page 50

13. Has the EBSS provided the right incentives in terms of promoting continuous efficiency gains in operating expenditure?

Yes. In the long run, however, in mimicking the operation of a competitive market, an innovator should only lose the commercial benefit when other businesses cost match. In a well-functioning scheme, the AER would not need to use the building block model at all; revenue allowances would be kept at the same level (adjusted for output volume variations) for the most efficient firm(s). Other firms would be regulated using CPI-X, where X is based on the relative efficiency of the firm compared to the most efficient firm.

14. Is the current level of rewards and penalties under the EBSS appropriate? What considerations should be given when determining the EBSS carryovers, including the length of carryover period?

The scheme should be simplified by changing how the base opex is determined.

15. The EBSS assumes that only base year operating expenditure is used to inform forecast operating expenditure. How does our use of economic benchmarking to assess the efficiency of base year operating expenditure affect the incentive to reduce operating expenditure? Should the EBSS be amended to reflect this?

No. The base year should remain unchanged; benchmarking should be used only to determine the trend in expenditure that should be applied in less efficient networks.

16. Should there be any other adjustments to the EBSS?

Possibly, but none that we are aware of.

Questions – Page 60

17. Has the CESS provided the right balance of incentives in terms of promoting continuous efficiency gains, efficient timing of investments (including efficient deferrals) and good capital expenditure forecasts?

No.

18. Is the current level of rewards and penalties under the CESS appropriate? Is a fixed level of 30 per cent still appropriate, or should be it changed? What considerations should be made to the appropriate level?

Not applicable.

19. Should the application of the CESS, and its rewards and penalties, change for individual networks where there are concerns about expenditure over-forecasting?

No, because it shouldn't apply to anyone.

20. Should there be any other adjustments to the CESS and capital expenditure incentive guideline?

Only its abolition.

Questions – Page 72

21. Do you agree with our proposal not to review the service performance component of the STPIS at this time?

Not really, but it needs to be in a wider context of discussing outputs.

22. Do you agree that there is appropriate flexibility across the STPIS and the customer service incentive scheme to ensure that customer preferences can be reflected in service performance incentives over time?

Not sure that either scheme allows for the most important incentive to increase the amount of electricity consumed within a distribution area per dollar of capital infrastructure.

23. Do you agree with our proposal to address transmission network service provider concerns about the market impact component of the STPIS within revenue determinations?

We are focused on DNSP issues.

Appendices

Appendix 1 – Extract from NER Version 179

6.2.8 Guidelines

(a) The *AER*:

(1) must make and *publish* the *Shared Asset Guidelines*, the *Capital Expenditure Incentive Guidelines*, the *Expenditure Forecast Assessment Guidelines*, the *Distribution Confidentiality Guidelines*, the *Distribution Service Classification Guidelines*, the *Asset Exemption Guidelines* and the *Cost Allocation Guidelines* in accordance with the *Rules*; and

6.3.2 Contents of building block determination

(a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:

(1) the *Distribution Network Service Provider's annual revenue requirement* for each *regulatory year* of the *regulatory control period*;

(2) appropriate methods for the indexation of the regulatory asset base;

(3) how any applicable *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* or *small-scale incentive scheme* is to apply to the *Distribution Network Service Provider*;

6.4.3 Building block approach

(a) **Building blocks generally**

The *annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building block approach, under which the building blocks are:

…

(5) the revenue increments or decrements (if any) for that year arising from the application of any *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* or *small-scale incentive scheme* – see subparagraph (b)(5);

(b) **Details of the building blocks**

(5) the revenue increments or decrements referred to in subparagraph (a)(5) are those that arise as a result of the operation of an applicable *efficiency benefit sharing scheme*, *capital expenditure sharing scheme*, *service target performance incentive scheme*, *demand management incentive scheme*, *demand management innovation allowance mechanism* or *small-scale incentive scheme* as referred to in clauses 6.5.8, 6.5.8A, 6.6.2, 6.6.3, 6.6.3A and 6.6.4;

6.4A Capital expenditure incentive mechanisms

(a) The *capital expenditure incentive objective* is to ensure that, where the value of a regulatory asset base is subject to adjustment in accordance with the *Rules*, then the only capital expenditure that is included in an adjustment that increases the value of that regulatory asset base is capital expenditure that reasonably reflects the *capital expenditure criteria*.

(b) The *AER* must, in accordance with the *distribution consultation procedures*, make and *publish* guidelines (the *Capital Expenditure Incentive Guidelines*) that set out:

(1) any *capital expenditure sharing schemes* developed by the *AER* in accordance with clause 6.5.8A, and how the *AER* has taken into account the *capital expenditure sharing scheme principles* in developing those schemes;

(2) the manner in which it proposes to make determinations under clause S6.2.2A(a) if the *overspending requirement* is satisfied;

(3) the manner in which it proposes to determine whether depreciation for establishing a regulatory asset base as at the commencement of a *regulatory control period* is to be based on actual or forecast capital expenditure;

(4) the manner in which it proposes to make determinations under clause S6.2.2A(i) if the *margin requirement* is satisfied; and

(5) the manner in which it proposes to make determinations under clause S6.2.2A(j) if the *capitalisation requirement* is satisfied; and

(6) how each scheme and proposal referred to in subparagraphs (1) to (5), and all of them taken together, are consistent with the *capital expenditure incentive objective*.

(c) There must be *Capital Expenditure Incentive Guidelines* in force at all times after the date on which the *AER* first *publishes* the *Capital Expenditure Incentive Guidelines* under the *Rules*.

6.5.6 Forecast operating expenditure

(c) The *AER* must accept the forecast of required operating 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 expenditure criteria*):

(1) the efficient costs of achieving the *operating expenditure objectives*; and

(2) the costs that a prudent operator would require to achieve the *operating expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):

…

(8) whether the operating expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8 or 6.6.2 to 6.6.4;

6.5.7 Forecast capital expenditure

(c) The *AER* must:

(1) subject to subparagraph (c)(2), accept the forecast of required 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 capital expenditure for the *regulatory control period* reasonably reflects each of the following (the *capital expenditure criteria*):

(i) the efficient costs of achieving the *capital expenditure objectives*;

(ii) the costs that a prudent operator would require to achieve the *capital expenditure objectives*; and

(iii) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(2) not accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if that forecast includes *expenditure for a restricted asset*, unless:

(i) to the extent that any such expenditure includes an amount of unspent capital expenditure for a *contingent project* in

accordance with paragraph (g), an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(2) in respect of that asset or that class of asset for that *contingent project*;
(ii) to the extent that any such expenditure relates to a *positive pass through amount*, an *asset exemption* has been granted by the *AER* under clause 6.4B.1(a)(3) in respect of that asset or that class of asset for that *positive pass through amount*; or
(iii) otherwise:
(A) that *Distribution Network Service Provider* has requested an *asset exemption* under subparagraph (b)(5) in respect of that asset or that class of asset; and
(B) the *AER* has granted that *asset exemption*.

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *capital expenditure factors*):

…
(8) whether the capital expenditure forecast is consistent with any incentive scheme or schemes that apply to the *Distribution Network Service Provider* under clauses 6.5.8A or 6.6.2 to 6.6.4;

6.5.8 Efficiency benefit sharing scheme

(a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Distribution Network Service Providers* and *Distribution Network Users* of:
(1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and
(2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,
the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.
(b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to *distribution losses*.
(c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:
(1) the need to ensure that benefits to *distribution service end users* likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*;
(2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure;

(3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses;
(4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and
(5) the possible effects of the scheme on incentives for the implementation of *non-network options*.

(d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace an *efficiency benefit sharing scheme*.

6.5.8A Capital expenditure sharing scheme

(a) A *capital expenditure sharing scheme* is a scheme that provides *Distribution Network Service Providers* with an incentive to undertake efficient capital expenditure during a *regulatory control period*.
(b) If the *AER* develops a *capital expenditure sharing scheme* in accordance with this clause, the *capital expenditure sharing scheme* must be consistent with the *capital expenditure incentive objective*.
(c) In developing a *capital expenditure sharing scheme*, the *AER* must take into account the following principles (the *capital expenditure sharing scheme principles*):
(1) *Distribution Network Service Providers* should be rewarded or penalised for improvements or declines in efficiency of capital expenditure; and
(2) the rewards and penalties should be commensurate with the efficiencies or inefficiencies in capital expenditure, but a reward for efficient capital expenditure need not correspond in amount to a penalty for the same amount of inefficient capital expenditure.
(d) In developing a *capital expenditure sharing scheme*, the *AER* must also take into account:
(1) the interaction of the scheme with other incentives that *Distribution Network Service Providers* may have in relation to undertaking efficient operating or capital expenditure; and
(2) the *capital expenditure objectives* and, if relevant, the *operating expenditure objectives*.
(e) In deciding:
(1) whether to apply a *capital expenditure sharing scheme* to a *Distribution Network Service Provider* for a *regulatory control period*; and
(2) the nature and details of any *capital expenditure sharing scheme* that is to apply to a *Distribution Network Service Provider* for a *regulatory control period*,
the *AER* must:
(3) make that decision in a manner that contributes to the achievement of

the *capital expenditure incentive objective*; and
(4) take into account:
(i) both the *capital expenditure sharing scheme principles*, and the matters referred to in paragraph (d), as they apply to the *Distribution Network Service Provider*; and
(ii) the circumstances of the *Distribution Network Service Provider*.