



Major Energy Users Inc.

Australian Energy Regulator

Better Regulation Program

Proposed Guidelines for Incentives for Opex and Capex

MEU Comments on the draft guidelines

Submission by

The Major Energy Users Inc

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Preface

The MEU notes its concerns with the development of and the approach to the guidelines in the following sections. Whilst the guidelines are an improvement on what applied under the previous rules, the MEU considers that further improvement along the lines suggested in this submission should be implemented in the final version of the guidelines. Unless these improvements are implemented, the MEU considers that the AER will have lost an opportunity to ensure the guidelines deliver the optimum benefit implied by the requirement of the energy Laws that the focus of the rules and guidelines must be in the long term interests of consumers.

The MEU was heavily involved in the development of the Chapter 6A rules in 2006, the Chapter 6 rules in 2007 and the gas rules in 2008. The MEU saw that during the development of these rules the AER endeavoured to provide greater balance between the interests of NSPs and consumers in the development of the rules during debates on the rule changes, yet the AEMC (and MCE) failed to use the opportunity to incorporate the moderating input from the AER (and others) to ensure there was a sensible balance in the final outcomes. In the development of these guidelines, the AER has the opportunity to ensure there will be appropriate balance for future regulatory assessments.

The new network rules provide the AER with considerable discretion and the development of these guidelines is intended to provide a structure for the AER to use the discretion it has been granted. Unfortunately, the MEU has identified a number of significant shortcomings in the guidelines (especially for the capex incentive) that will result in a less than balanced outcome for consumers and the AER is requested to reassess the draft guidelines in light of the MEU concerns raised.

1. Introduction

The Major Energy Users Inc (MEU) welcomes the opportunity to provide comments on the AER draft incentive guidelines (opex and capex) released in August 2013.

The guidelines are being established under the recently approved revised network Rules for gas and electricity. The amended rules recognise that the network service providers (NSPs) are incentivised to maximise the revenue they are allowed to provide the service. The incentive program is designed to provide an incentive to network service providers (NSPs) to reduce their costs so that the benefit of lower costs can be transferred to consumers over time, thereby reducing the costs to consumers for providing the service. This incentive regime has aspects of commonality with what occurs in a competitive environment where providers continuously seek to reduce their costs and thereby can reduce their selling prices to increase market share.

The MEU supports the concept for incentives to be provided to NSPs but is concerned that the incentive programs do not become an avenue for NSPs to be able to “game” the system and so increase their profitability at consumers’ expense. There have been far too many instances during previous rounds of pricing reviews where NSPs have used the regulatory approach to enhance their commercial position and there is every expectation that NSPs will continue with such practices.

An over-riding concern is that there are many aspects and inter-relationships embedded within the mix of the guidelines and the underlying rules that the MEU believes provide NSPs with opportunities to game the regulator. The MEU provides details of its concerns in the following sections of this submission.

1.1 Critical aspects affecting incentive programs

The MEU considers that incentive schemes should provide for continuous improvement, and not be the initial driver of setting allowances near the efficient frontier. The initial setting of efficient allowances is the role of benchmarking which is addressed in another guideline.

Thus the first critical element of the incentive programs must be that the allowances provided are at (or at least near) the efficient frontier, so that consumers are not exposed to providing rewards based on savings that have not been earned. It is easy to underspend an allowance where the initial allowance is too high compared to the real costs for providing the service

The second critical element must be that NSPs cannot transfer costs in order to deliver an apparent saving. Examples of this are:

- Where the incentive program has defined exclusions which allows the movement of costs from elements subject to the incentive to elements excluded from the incentive program, and
- Where a project allowed for one period is transferred to the next period, resulting in an underspend in the current period but where the costs are included in a subsequent period.

The third critical element that must be addressed is that the incentive programs must be harmonised so that a saving in one aspect is balanced by equal incentives in another area. For example:

- An overspend in capex will be penalised under the capex incentive yet this overspend should result in opex savings and in improved service standard performance. This means, for example, that great care is needed to ensure that the incentive to underspend on capex has a similar power to the combined incentives from opex and service standard performance.
- The incentive must not be overwhelmed by other incentives. This means, for example, that a capex incentive is not lost by the outcomes of the much larger incentive to overspend driven by the rate of return allowance assisted by the automatic roll in of capital into the RAB.

Unless the AER ensures that these critical aspects are addressed, then the incentive regime will not be successful and consumers will continue to overpay for the provision of essential services provided by monopolies.

1.2 The underlying incentives in the rules

Two draft guidelines have been developed; one for opex (Efficiency Benefit Sharing Scheme – EBSS) and the other for capex (Capital Efficiency Sharing Scheme – CESS). What must also be highlighted are the underlying incentives embedded within the Rules, and these have a similar if not greater influence on how an NSP might react to the two headline incentive schemes. These underlying incentives are:

- The reliability risk to consumers of insufficient funding of an NSP is greater than the cost of excess funding. This means that the AER takes a conservative view on the settings of all allowances, and is prepared to increase funding during a regulatory period if there is a risk to the NSP being unable to provide the service.

An example of this is where the AER has agreed to increase the vegetation clearing allowance provided to SA Power Networks (SAPN) because the breaking drought had resulted in greater vegetation growth

than was forecast. In contrast, if the allowance had been based on the higher vegetation growth rates resulting after breaking the drought and then dry times resulted, it is unlikely that SAPN would have sought a pass through for a lesser amount for vegetation clearance.

This example highlights that there is a bias in favour of NSPs in regard to risks.

- The automatic roll in of capex (unless there is an overspend on capex and some of the capex is identified as inefficient) reduces risk for the NSP and imposes higher risks on consumers that inefficient capex could be included in the RAB. This means that any incentive to underspend is weakened by the lower risk of inefficient capex being excluded.
- The ability of an NSP to seek greater capex allowances through the contingent project process, increases the power of the automatic roll in incentive
- If there is a differential between the cost of capital between that allowed and what an NSP actually achieves, this provides a commercial incentive to overspend. As the AER has a policy of being conservative this means that the likelihood of a WACC differential favouring the NSP is greater than not, providing impetus for the incentive to overspend. This WACC differential is even more pronounced for government owned NSPs than for privately owned NSPs as government owned NSPs secure their debt at much higher credit ratings than do privately owned NSPs. This is a result of the AER decision to not differentiate rates of returns between privately and publicly owned NSPs
- The capex forecasting approach allows NSPs to set an amount for capital projects but provides the ability to use the funds for any project. This allows the NSP to underspend in one regulatory period by rescheduling a project used to justify the capex allowance into a later regulatory period.

Unless the incentive schemes recognise how they interact with the underlying (implicit) incentives in the rules, the incentive schemes will be extremely weakened in their power to achieve the outcomes sought.

1.3 Incentive to minimise the cost of debt - the “elephant in the room”

Whilst the AER has provided incentive schemes for two of the three main cost elements in a regulatory decision (capex and opex) it has failed to address providing an incentive sharing scheme for the single largest cost element in a regulatory allowance – the allowance for the cost of debt.

Whilst the AER states that NSPs should be encouraged to reduce the cost of debt, it has made no attempt to provide a sharing scheme where the benefits for an NSP achieving a lower cost of debt than that allowed. This is particularly concerning as the AER approach to setting the cost of debt allowance using benchmark debt costs is based on Australian corporate bonds which, as recognised by the ACCC (in a working paper¹ on the cost of debt), do not reflect the lowest cost of debt available. On page 53, the ACCC RBD working paper notes:

“Given the regulator cannot calculate the cost of debt by applying an appropriate weight to each source of debt financing [bank debt, fixed, floating, international, callable, subordinate etc], the second best method is to compensate the regulated business with reference to one source of debt financing. However it should be explicitly recognised in decisions that such a method over time will result in a conservative cost of debt estimate favouring the regulated business.”²

This means that there will be an overt bias in favour of the NSP between what the AER allows for the cost of debt (based on costs for high priced debt) and what the NSPs actually incur as their cost of debt through sourcing debt from lower cost sources.

If there is a consistent bias in the AER overstating the allowance for the cost of debt, there needs to be a method for consumers to benefit from the expected under-run in debt costs actually incurred. A failure to implement such a scheme means that the shareholders of NSPs enjoy a much enhanced dividend at the expense of energy consumers³.

The AER has consistently commented that it does not consider consumers should be exposed to the actual costs of debt incurred by NSPs as this will incentivise the NSPs to look on regulation as a cost recovery exercise. The MEU finds this comment facile. The AER has stated clearly that it will use the revealed costs for opex for setting future opex providing the opex incurred by an NSP is subject to an incentive arrangement to reduce the NSP costs. There is no difference between such an approach used for opex and costs incurred for provision of debt financing.

If a revealed cost approach and EBSS is considered appropriate for opex, there is no reason why the same approach could not apply to the cost of debt.

¹ Available at

<http://transition.accc.gov.au/content/item.phtml?itemId=1110824&nodeId=1e163339c5c2a9872b19be252cb1e8f2&fn=Regulatory%20Development%20-%20Estimating%20the%20Cost%20of%20Debt.pdf>

² This observation is made in the RDB paper on the premise that the cost of debt will be based on Australian corporate bonds

³ In the case of state owned NSPs, the shareholders also receive the income tax equivalents to further expand their dividends.

In fact, in the case of opex, the AER has a separate tool to assess whether opex is approaching the efficient frontier (through benchmarking) so the intention is that opex should be close to efficient under the impact of these schemes. In contrast, the AER specifically recognises that the cost of debt allowance will more likely than not, provide a benefit to the NSP yet has failed to provide any way for consumers to benefit from improved financing approaches that can be used. The AER can benchmark actual debt costs more effectively than it can opex, as the AER can examine actual costs NSPs incur for their debt (as well as from many other capital intensive firms) to identify what are efficient debt costs.

The failure of the AER to address an incentive sharing scheme in relation to the cost of debt is a major failure of the current review.

Further, this failure to address the cost of debt has implications for the other incentives, especially that for moderating capex, where the effectiveness of the incentive program is heavily and negatively impacted by the lack of any incentive to share the benefits of lower costs for debt as, when there is a WACC differential, the impact of this WACC differential can eliminate any penalty that occurs from the capex incentive scheme. This is demonstrated in section 2.2.4 below.

1.4 Conclusions

The AER, in its Issues Paper on incentives, states that the prime purpose of the incentive is to encourage the NSP to use less of the allowance (capex and opex) than the AER provides. It is by providing a reward (or penalty) for bettering (or exceeding) the allowance that the NSP is incentivised to approach the efficient frontier for costs. Reaching the efficient frontier for costs is expected to reduce costs for providing the service to be “in the long term interests of consumers”.

The MEU supports the provision of incentives but is of the view that the AER has failed to recognise that:

- An incentive scheme needs to recognise that an NSP should have to earn any benefit it receives. The schemes proposed are based on an assumption that the AER allowances will be efficient, but it is clear that in most cases the allowance will be more than is needed to provide the service, allowing the NSP to receive a benefit that it has not earned.
- There are many other incentives built into the Rules that work against any explicit incentive arrangement and these need to be accommodated in the explicit schemes.

- The costs for debt financing by NSPs should be subject to an incentive sharing scheme.

Unless these aspects are addressed, the AER guidelines will fall short in providing an outcome for consumers that is equitable.

2. The AER approach and MEU observations

The AER has provided two draft guidelines to provide incentive schemes in relation to opex (the EBSS) and capex (the CESS). The EBSS is a refinement of the previous versions used for a number of years whereas the CESS is a new scheme.

Accompanying these two guidelines, is the Service Target Performance Incentive Scheme (STPIS) which provides rewards (penalties) for better (worse) outcomes in relation to service standards. The STPIS has been in use for a number of years (in various guises) and has provided a benefit to consumers.

The AER has stated that it has developed each of the three schemes to be mutually consistent so that the power of the incentives provided are not greater or less than another, eliminating the ability for NSPs to “game” each to maximise the rewards they might achieve by “incentive shopping”. However, the MEU has noted that this approach might not always work as intended in instances where an overspend in one element might have a positive effect in the other two incentives - effectively doubling the reward. For example, an overspend in capex could well result in an improvement in the reward from the STPIS and the reward from the EBSS.

The AER has determined that all three schemes should be symmetrical (ie the ability to gain rewards or suffer penalties will be the same. In this regard the MEU notes that this approach has not universally been applied as the STPIS has aspects that are not symmetrical in that the rate of achieving rewards in some elements is greater than the rate of applying penalties. The reason for this is pragmatic, yet it does result in some asymmetry. The AER has not addressed this asymmetry in discussions on the revised EBSS and the new CESS.

2.1 Better regulatory management of Opex

The Efficiency Benefit Sharing Scheme (EBSS) is an approach to provide an incentive to the NSPs to improve the efficiency of their opex and pass the benefit to consumers over time. At the same time, this will allow the AER confidence in using historical costs to set the basis for future allowances – the “revealed cost” approach.

The MEU supports the use of the EBSS but has noted some shortcomings which are noted below.

The AER has proposed some refinements to the EBSS and the MEU comments on these in the following sections.

2.1.1 The setting of future costs

Intrinsic to the effective use of an incentive sharing scheme is that the allowances provided are near to the efficient frontier. If they are not, an incentive sharing scheme merely becomes a vehicle rewarding inefficiency - rewarding NSPs for doing what they should have been doing in the first place. Unless costs are set near the efficient frontier, the EBSS will increase consumer costs for no reason.

The AER has identified that it intends to use the revealed cost approach (recognising the impact of the EBSS) for setting future allowances in preference to applying benchmarking as the prime tool for setting future allowances. In contrast, the AER could use benchmarking techniques to set the future allowances and use the revealed cost approach to provide confidence that the future allowances are appropriate.

The MEU accepts (reluctantly) that the revealed cost approach is appropriate for setting future allowances pending better datasets being developed for benchmarking. However, as the better datasets are developed, the MEU considers that benchmarking is more likely to provide better outcomes for consumers until NSP expenditure approaches the efficient frontier.

Under the revealed cost approach, there is a lesser incentive for each NSP to actively seek the most efficient methods for operating and maintaining its assets- this is the argument the AER uses not to use an incentive program for the cost of debt. The revealed cost approach has some similarity to a “bottom up” approach to setting future allowances as it reflects historic practice rather than current best practice. The addition of the EBSS provides some impetus for continuous improvement but essentially it assumes that past performance is near the efficient frontier and therefore only marginal improvement can be expected.

On the other hand, properly applied benchmarking identifies where the efficient frontier might be and, if benchmarking is applied, provides an immediate impetus for the NSP to be reimbursed only for efficient costs. This will drive the NSP to quickly operate at the efficient frontier.

The MEU notes that the AER is, whilst preferring the use of revealed costs as the basis for forecasting, prepared to adjust future opex allowances if there are “material inefficiencies” identified as a result of benchmarking. The AER would still use the EBSS in its same form even where the base year costs are adjusted by removal of “material inefficiencies”. The MEU supports this approach.

2.1.2 The EBSS model

The MEU has been supportive of the EBSS that has been in operation for a number of years although the MEU has also been of the view that the declaration of the base year (usually the second last year of a regulatory period) to be used by the AER for the opex allowance for the next regulatory period (the revealed cost) provides an incentive for NSPs to act to increase the expenditure in this year and under-run costs in other years. That this occurs cannot be doubted because there has been seen a trend over many years (particularly in the absence of the current EBSS model) for the second last year of a regulatory period to show higher opex than is seen in other years.

The AER considers that it has addressed this gaming approach in the revised design of the EBSS model by making the EBSS operate in a continuous manner across regulatory periods. The issue of the incentive for the NSP to deliberately overspend in the base year and underspend in other years is, to some degree, overcome by the model.

However, there is still an (although reduced) incentive to continue the practice as the following two charts⁴ show.

	A	B	C	D	E	F	G	H	I	J	K
1	EBSS model										
3											
4	Forecast base year: 4										
6	Year	1	2	3	4	5	6	7	8	9	10
7	Forecast opex before adjustments (F)	100	100	100	100	100	100	100	100	100	100
8	Actual (A)	100	100	100	100	100	100	100	100	100	100
9	Cumulative saving (F-A)	0	0	0	0	0	0	0	0	0	0
10	Incremental saving (E)	0	0	0	0	0	0	0	0	0	0
11	Carry-over of gains made in										
12	1		0	0	0	0	0				
13	2			0	0	0	0	0			
14	3				0	0	0	0	0		
15	4					0	0	0	0	0	
16	5						0	0	0	0	0
17	6							0	0	0	0
18	7								0	0	0
19	8									0	0
20	9										0
21	10										
22	Carry-over, (B)						0	0	0	0	0
23	Forecast opex + Carry-over (F+B)	100	100	100	100	100	100	100	100	100	100

This shows that if the annual allowance is \$100 and the annual actuals are \$100 for each year in period 1, the NSP receives an adjusted amount of opex in period 2 of \$100 pa, the same amount it received in period 1. This is appropriate because the \$500 is seen as efficient.

⁴ This is the model provided by the AER with its draft guideline.

However if the NSP artificially reduces the actuals in each year other than the base year by \$10 and loads up by the foregone amounts of \$40 from the other years into the base year, the opex it receives in period 2 is \$110 (the sum of line G23 to K23 in the table below), \$10 higher than what is efficient.

	A	B	C	D	E	F	G	H	I	J	K
1	EBSS model										
3											
4	Forecast base year: 4										
6	Year	1	2	3	4	5	6	7	8	9	10
7	Forecast opex before adjustments (F)	100	100	100	100	100	140	140	140	140	140
8	Actual (A)	90	90	90	140	90	90	90	90	140	90
9	Cumulative saving (F-A)	10	10	10	-40	10	50	50	50	0	50
10	Incremental saving (E)	10	0	0	-50	0	0	0	0	-50	0
11	Carry-over of gains made in										
12	1		10	10	10	10	10				
13	2			0	0	0	0	0			
14	3				0	0	0	0	0		
15	4					-50	-50	-50	-50	-50	
16	5						0	0	0	0	0
17	6							0	0	0	0
18	7								0	0	0
19	8									0	0
20	9										-50
21	10										
22	Carry-over, (B)						-40	-50	-50	-50	0
23	Forecast opex + Carry-over (F+B)	100	100	100	100	100	100	90	90	90	140

By making the EBSS continuous over periods, the new approach does reduce the benefit from loading the base year, but not entirely. This inconsistency needs to be addressed.

2.1.3 Power of the incentive

The AER notes that there have been suggestions by some NSPs that the power of the EBSS be increased. In principle, the MEU considers that such an option could be considered if there was clear evidence that, by doing so, there would be an increased benefit to consumers. The MEU sees that increasing the power of the incentive would provide greater rewards to NSPs but if the bias of setting conservative allowances continues, the increased power would mean greater harm to consumers.

Additionally, if such an increase in power of the EBSS incentive is to be implemented, the MEU points out that there would need to be equivalent changes to other incentive schemes in order to maintain equilibrium between all schemes so that there is no benefit to be gained by “incentive scheme shopping” so that there resulted an increased benefit to the NSPs from shifting outcomes from one scheme to another.

2.1.4 Changes proposed for the EBSS

The MEU notes that the revised EBSS would be adjusted only to reflect opex changes resulting from pass throughs and contingent projects, capitalised opex, specific elements of opex that are clearly inappropriate for inclusion in the EBSS (eg debt raising costs) and inflation.

All other opex (including elements of what are considered to be uncontrollable opex (eg network growth) would be retained within the EBSS but with the impact of such uncontrollable opex outcomes used for forecasting purposes. Additionally, the AER proposes that both the allowed and actual opex would be adjusted for pass throughs and contingent projects to maintain equivalence (allowances and actuals being assessed on the same basis) in the incentive scheme

The MEU has noted that NSPs have, in the past, sought (and been granted in some cases) the ability to select which elements of the opex should be included in the base year allowance and which elements will be recalculated on a "bottom up" basis; the result of such an approach results in an increase in the future opex allowance. The MEU has consistently been an opponent of such selective use of the base year opex as it destroys the basis on which the incentive regime is meant to operate. The decision of the AER to minimise the exclusions from the EBSS calculation and to reduce those opex elements which can be calculated from a "bottom up approach" should result in a better outcome for consumers.

To maintain the integrity of the EBSS (both from a sharing basis and use in setting future allowances), there should be minimal adjustment made to the opex allowances and actuals, and the only adjustments made should be those required to maintain equivalence of the basis on which they are compared.

However, the MEU has still identified two significant shortcomings with the EBSS way which have to be addressed in some way:

- The decision to add to the opex allowance those elements of pass throughs, re-openers and contingent projects allows the NSP to increase the opex allowance and by inflating these allowances, unnecessarily increase the opex allowance. That the NSP can do so, is supported by the fact that the additional allowance from the pass through, re-opener or contingent project will not be benchmarked and will be estimated on a "bottom up" approach. This will provide the NSP the ability to increase its base opex should it have a concern that it is likely to over-run its initial opex allowance and thereby incur a penalty. The MEU considers the AER needs to be alert to such opportunism. Excluding the

increases in costs from both the allowance and the actuals should address this ability for opportunism.

- The MEU has noted that NSPs have, at times, transferred costs from one period to another, reducing costs in the earlier period in order to earn a bonus from the EBSS. The transferred costs to the next period effectively allow the NSP to be paid twice for the same work and gain a bonus at the same time. An example related to this is in vegetation clearing (see section 1.2 above) where SAPN could have earned a bonus for not being exposed, in times when the drought strengthened, to as much vegetation clearing as had been forecast due to lower vegetation growth during the drought period. SAPN was subsequently allowed by the AER to increase its opex because the vegetation clearance costs increased due to greater rainfall after the drought broke. The MEU sees that the AER has to introduce controls to ensure such double counting and bonus payments do not occur.

2.1.5 Risk and forecasting error

In making its draft decision to minimise exclusions from the EBSS, the AER implies that the risk of forecasting error is symmetrical. Where a firm is subject to competition, this risk can be considered to be symmetrical as the firm has competing incentives to minimise the cost to keep prices low and maximise the opex allowance to ensure the allowance will not be exceeded.

In a regulated monopoly environment, the countervailing pressure to minimise the cost is less, particularly as the regulator has to demonstrate the claimed cost is excessive. As a result, the regulator consistently takes a conservative view on costs because the cost of the loss of supply is greater than cost of over pricing. This means that the risk of forecast error is asymmetrical with forecast under allowances being less likely than over allowances.

Therefore, with consumers bearing a higher chance of under-pricing but a lower chance of over-pricing, the result is consumers will have a greater potential for paying more for the service due to the asymmetry of the risk, and paying again a benefit through the EBSS.

2.1.6 Conservatism in the allowed opex

The AER has an approach which is overtly conservative, as a little conservatism in the setting of allowances is considered to be in the long term interests of consumers.

The MEU accepts that some conservatism is needed, but recognises that there is no attempt to establish how conservative an overall regulatory allowance actually is. The approach used by the AER is for every element of a reset should be set conservatively and this results in a compounding effect of conservatism throughout the regulatory decision.

The MEU is of the view that the AER should assess each element without any conservatism and then apply a recognised specifically identified adjustment to include this conservatism.

In the case of the EBSS, the outcome for consumers is based on the initial opex allowance which has a conservatism (of an unknown amount) built into the allowance. This means that the chance of an underspend is more likely than an overspend, providing an asymmetric risk for consumers. This asymmetry should be reflected in the sharing scheme.

2.1.7 Overall assessment

Subject to the issues raised above, the MEU considers the AER has developed an approach for the EBSS that is flexible and provides a sound basis for both encouraging NSPs to seek more efficient methods for operating and maintaining their networks and incorporating the benefits of more efficient practices for the long term benefit of consumers.

2.2 Better regulatory management of Capex

The Capital Expenditure Sharing Scheme (CESS) is an approach to encourage NSPs to keep their actual capex below that allowed by the AER at the regulatory reset. In form, it resembles the reasonably successful EBSS used to encourage NSPs to minimise their opex and pass onto consumers the benefits of this increase in efficiency.

The CESS is accompanied by two other controls on over expenditure:

- The optional use by the AER of forecast depreciation or depreciation based on actual capex
- An ex post review of capex where the actual capex has exceeded the allowance

In addition to these two controls the AER has identified that it must make better assessments of required capex at the revenue reset and that it will examine capex to assess whether capex allowed for one period has been deferred to the next, thereby delivering a benefit to the NSP through the CESS.

2.2.1 The CESS

Under the current regulatory arrangements, underspend of capex in the early years of a regulatory period provides a greater benefit to an NSP than the penalty it incurs for an overspend in later years. The AER points this out in its explanatory statement and highlights that the application of a CESS will rebalance this incentive. This is the main benefit of the CESS.

What the CESS does not address, is:

- The source of funds for capex is constrained by the approach taken by the firm. Most firms use retained earnings as the prime source of equity and firms with a private ownership have an extreme reluctance to seek new capital investment. However the access to debt financing is massively different between government owned NSPs and privately owned NSPs. Government firms have much easier access to debt and at lower costs than do privately owned firms. This means that any approach to moderate capex must address the this differential in access to and cost of debt (the WACC differential).
- That there is conservatism in the setting of allowances, providing a change in the balance of risks, leading to a lower risk of an overspend than an underspend
- The lower risk to NSPs of overspends as NSPs have the ability to seek increased capex allowances from re-openers, pass throughs and contingent projects.
- The ability of the NSP to forecast expenditure for a project in one period and then defer the project to the next period, automatically generating itself a reward for underspending capex but still retaining the full cost (or even higher cost)⁵ for the project for a later time. Consumers face the risk that the deferral will result in lower service performance although, in theory, the STPIS is intended to rebalance this risk. But, as the STPIS sets the targets for performance based on historic outcomes⁶, there are a number of other aspects that influence service standards. History has shown that service standards move relatively slowly over time, so there a considerable lag between a lack of investment and a reduction in service standards.

⁵ The MEU has seen instances where the costs for the same project have increased significantly when deferred to a later time

⁶ The STPIS uses up to four years of past performance to set future targets

- The automatic roll in of efficient capex means there is still a reward for overspending as efficient capex receives a return on the investment for the life of the asset, even if the CESS imposes a short term penalty.
- However, the greatest benefit NSPs have to overcome the CESS is where there is a WACC differential

All of these provide a positive incentive to overspend and capex overspends have been identified as one of the main causes of the massive rise in network prices since the Rules were changed after 2006.

2.2.2 Symmetry of the incentive

The AER has established the capex incentive scheme (the CESS) as one which is symmetric implying there is a balance of risks between over-spend and under-spend.

As noted in section 1.2 and 2.2.1 above, there are a number of underlying incentives which act to reduce the power of the CESS, in that any penalty incurred by an overspend is severely reduced by the underlying incentives.

Therefore, the AER assumption that a symmetrical CESS reflects equal risk between over and under spend is not supported when the underlying incentives are included in the assessment. On this basis alone, the MEU considers that the penalty for overspend should be greater for overspends and than the reward for underspending.

In its discussion, the AER explanatory statement (page 19) refers to a Citipower observation:

“Since overspending is not necessarily inefficient, overspends should not be subject to a higher penalty than should underspends.”

The fact that the AER has determined that the CESS should be symmetrical implies that the AER supports this observation. While accepting that some overspending might be classed as efficient, the MEU notes that, in a competitive environment, there is a fixed amount of capex available to a firm and, if there is an overspend in one area, the firm must reprioritise its other capex so that it stays within its available capital allowance. To do otherwise means the firm will either reduce its profit or increase its prices, risking a loss of market share.

However, in a competitive environment, underspends are not impacted in this way, so therefore there is asymmetry in the penalty/reward arrangements in the competitive environment. As regulation is intended to

apply competitive pressures, having an asymmetric CESS is consistent with what occurs in a competitive environment.

2.2.3 Conservatism in the allowed capex

The AER has an approach which is overtly conservative, as a little conservatism in the setting of allowances is considered to be in the long term interests of consumers.

The MEU accepts that some conservatism is needed, but recognises that there is no attempt to establish how conservative an overall regulatory allowance actually is. The approach used by the AER is for every element of a reset should be set conservatively and this results in a compounding effect of conservatism throughout the regulatory decision.

The MEU is of the view that the AER should assess each element without any conservatism and then apply a recognised specifically identified adjustment to include this conservatism.

In the case of the CESS, the outcome for consumers is based on the initial capex allowance which has a conservatism (of an unknown amount) built into the allowance. This means that the chance of an underspend is more likely than an overspend, providing an asymmetric risk for consumers. This asymmetry should be reflected in the sharing scheme.

2.2.4 The WACC differential

Modelling of the capex incentive has been undertaken by consumers in a more holistic way than that done by the AER; in this modelling, the long term return on an efficient overspend is also included, but incorporating the impact of a differential in the weighted average cost of capital (WACC) when the allowed WACC is higher than the actual WACC the NSP incurs.

The model developed shows that the greater the WACC differential the more the CESS incentive becomes irrelevant.

The issue of the WACC differential is in part discussed in section 1.3 above but there are four main causes for there to be a WACC differential, all of which result from how the cost of debt is addressed.

1. As noted in 2.2.2 above, the issue of conservatism also results in the WACC elements being conservatively set so that the allowed WACC is more likely to be higher than the actual WACC,
2. The AER has decided to establish the setting for the cost of debt on a more readily used benchmark cost (the Bloomberg Fair Value - BFV - curve for Australian corporate bonds) but as is noted in

section 1.3 above, this approach is known to provide a higher cost of debt allowance than is likely to be incurred by NSPs which use a number of lower cost sources of debt in addition to the Australian corporate bond market.

3. There is clear evidence that the BFV curve overstates the cost of debt for Australian corporate bonds that apply to regulated utilities. For example, recently APA Group (which has a mix of regulated and unregulated utility assets) sought debt on the Australian corporate bond market at nearly 200 bp below the equivalent debt cost forecast by the BFV curve.
4. Over 80% of electricity network assets are owned by state governments and the state owned NSPs source their debt from the state Treasury corporations. These state Treasury corporations access debt based on very high (commonly AAA) credit ratings and lend to their related NSPs at a small premium to this level. This results in state owned NSPs actually paying for their debt at a much lower rate than can be achieved by private corporations accessing debt via the Australian corporate bond market. This lower cost of debt has been observed in annual reports of these government owned NSPs.

If debt is sourced at lower costs than the implied cost used by the AER to develop the WACC for its “benchmark entity” then there is a WACC differential.

This WACC differential causes two main detriments to consumers – firstly, and most obviously, it means that consumers are paying more than is needed for the provision of the service⁷ and, secondly, a WACC differential is a major driver for an NSP to overspend on investments..

If a firm receives a greater return for investing than the costs that it incurs, it will invest more than necessary as this provides a greater benefit to shareholders.

The WACC differential has a major impact on the relative power of the CESS. Modelling⁸ shows that for an NSP to incur a net penalty under the proposed CESS (ie with 30% symmetrical sharing), there has to be a

⁷ It is for this reason that the MEU has consistently sought for there to be an incentive sharing scheme where consumers get some value from NSPs accessing debt at lower costs than the AER benchmark.

⁸ The model was developed by Mr Bruce Mountain of Carbon + Energy Markets which provides both the impact of the CESS and the long term rewards from investing. The AER has reviewed the model and has advised that the model does reflect the CESS and the long term outcomes of investment. The model has been shared with consumer representatives of the AER Consumer Reference Group. The MEU appreciates the work done by Mr Mountain in preparing the model and for allowing it to be used by advocates for consumers

capex overrun of over 40% for a 35 year life asset if there is a WACC differential of 100 bp real. This effect is shown in the following snapshot⁹.

	Net position to firm		Allowed WACC	5.50%		
Loss during regulatory period	-\$1.29		Actual WACC	4.50%		
Gain once rolled into RAB	\$1.29		Share of overspend to be borne by the firm	30%		
Net position	-\$0.00		Share of underspend to be borne by the firm	30%		
			\$12.67	PV of dep+retn over remaining life of asset using allowed WACC		
PV of overspend/underspend at end of reg. period	-\$4.29		\$13.96	PV of dep+return over remaining life of the asset using actual WACC		
Firm's share	-\$1.29		\$1.29	Difference		
Difference between allowed and actual	-\$ 4.10	\$ -	\$ -	\$ -	\$ -	
Regulatory period						
Allowed						
	1	2	3	4	5	
\$	10.00	\$ 9.71	\$ 9.43	\$ 9.14	\$ 8.86	Opening RAB
\$	0.29	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.29	Forecast depreciation
\$	9.71	\$ 9.43	\$ 9.14	\$ 8.86	\$ 8.57	Closing RAB
\$	0.55	\$ 0.53	\$ 0.52	\$ 0.50	\$ 0.49	Return
Actual						
\$	14.10	\$ 13.81	\$ 13.53	\$ 13.24	\$ 12.96	Opening RAB
\$	0.29	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.29	Forecast depreciation
\$	13.81	\$ 13.53	\$ 13.24	\$ 12.96	\$ 12.67	Closing RAB
\$	0.78	\$ 0.76	\$ 0.74	\$ 0.73	\$ 0.71	Return

Further investigation using the same model shows that the longer the life of the asset or the greater the WACC differential, the more the WACC differential erodes the impact of the CESS.

If the CESS sharing is made asymmetrical (say 30% reward to the NSP for underspend and 90% penalty for over spend, then for the same example above, the overspend needs only exceed ~10% in order to impose a penalty on the NSP as the following snapshot shows

⁹ This is a snapshot from the Bruce Mountain model

	Net position to firm		Allowed WACC	5.50%		
Loss during regulatory period	-\$0.98		Actual WACC	4.50%		
Gain once rolled into RAB	\$0.98		Share of overspend to be borne by the firm	90%		
Net position	-\$0.00		Share of underspend to be borne by the firm	30%		
			\$9.61	PV of dep+retn over remaining life of asset using allowed WACC		
PV of overspend/underspend at end of reg. period	-\$1.03		\$10.59	PV of dep+return over remaining life of the asset using actual WACC		
Firm's share	-\$0.98		\$0.98	Difference		
Difference between allowed and actual	-\$ 1.04	\$ -	\$ -	\$ -	\$ -	
Regulatory period						
Allowed						
	1	2	3	4	5	
\$	10.00	\$ 9.71	\$ 9.43	\$ 9.14	\$ 8.86	Opening RAB
\$	0.29	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.29	Forecast depreciation
\$	9.71	\$ 9.43	\$ 9.14	\$ 8.86	\$ 8.57	Closing RAB
\$	0.55	\$ 0.53	\$ 0.52	\$ 0.50	\$ 0.49	Return
Actual						
\$	11.04	\$ 10.75	\$ 10.47	\$ 10.18	\$ 9.90	Opening RAB
\$	0.29	\$ 0.29	\$ 0.29	\$ 0.29	\$ 0.29	Forecast depreciation
\$	10.75	\$ 10.47	\$ 10.18	\$ 9.90	\$ 9.61	Closing RAB
\$	0.61	\$ 0.59	\$ 0.58	\$ 0.56	\$ 0.54	Return

In practice, the WACC differential for state government owned NSPs is greater than 100 bp and the bulk of the network assets have a life longer than the 35 years used in the modelling, indicating that the example displayed in the snapshots is quite conservative.

Whilst it is recognised that the CESS does reduce the reward from over investing, it is the net benefit that an NSP would gain from over-investing that is the key driver of whether an investment will be made or not.

This modelling shows that either:

- An asymmetric reward/penalty regime is essential for the CESS to provide an effective incentive; or
- The potential for WACC differential has to be reduced, preferably by using a revealed cost approach to setting the allowed WACC based on recent actual debt costs.

2.2.5 Conclusion on the CESS

The inclusion of a CESS into the suite of incentive sharing schemes is seen as providing an appropriate technique to send signals to NSPs to moderate their capex programs.

However its structure needs to reflect that there is already a bias in the risks which mean that underspending should occur more than overspending. To compensate for this bias, the CESS needs to have an asymmetric sharing approach with a greater share of overspends being carried by the NSP. This reflects the reality experienced in competitive markets where firms carry all of the risk for over-runs in capex but share a proportion of the under-runs with their customers through lower prices.

Compounding this bias in risk, the structure of the building block approach allows the NSP to secure a certain return on all efficient overspends. This results in the CESS penalty being overwhelmed by the certainty of a long term reward for long lived assets when there is a WACC differential. As more than 80% of electricity assets are owned by NSPs which enjoy a significant WACC differential, to ignore this issue is not in the long term interests of consumers.

However, if the AER implemented a regime where the cost of debt was subject to a revealed cost approach and an incentive sharing scheme (such as applies to other recurrent costs such as those included in the opex) as proposed in section 1.3 above, then the likelihood of a WACC differential would reduce markedly, allowing the CESS to operate as is intended.

2.3 The approach to depreciation

The current arrangements for adjusting the RAB for depreciation are by the use of depreciation of actual investments. At the same time, the NSP has a fixed revenue within the regulatory period which is based on forecast capex. If the NSP can reduce its capex within a regulatory period, then the benefits it receives remain with the NSP. Pragmatically, consumers are particularly concerned with NSP overspends, as is noted in section 2.2 1 above, rather less emphasis on underspends.

The AER proposal for implementing forecast depreciation as the basis for the roll forward of the RAB recognises that the benefit to the NSP within the regulatory period is impacted by the methodology used to provide regulatory depreciation..

The AER has advised that it intends to use forecast depreciation as the default position for rolling forward the RAB and its approach will be advised ex ante if there is to be a change to the use of actual depreciation. Any such a change will be implemented if the performance of the NSP warrants this change to be imposed.

If an NSP overspends during a regulatory period, then the depreciation that it was allowed is less than the depreciation requirement that it actually incurs. If the NSP underspends, then it is better off. Therefore the approach to depreciation impacts the NSP's recovery under the building block approach. The use of forecast depreciation provides an incentive to the NSP not to overspend, and seek to underspend. The closer the overspend is to the end of the regulatory period, the lower the depreciation incentive is not to overspend. NSPs can then balance the short term benefit they gain against any long term benefit that might arise, such as the return on a larger RAB¹⁰.

The AER has assessed the benefits of its approach to depreciation on the basis of the benefits/detriment to the NSP. It has failed to take into consideration the long term detriments to consumers that will occur from their approach.

The MEU uses the following example to show the detriments to consumers.

If the depreciation rate is 2% pa and there is a capex allowance of \$100m incurred at the start of the last year (year 5) of a regulatory period, then the forecast depreciation for year 5 would be \$2m (with this amount being recovered in full as this was allowed at the reset) and the opening RAB for the next period would include \$98m for the capex. If the actual capex for the same period was \$110m (ie a \$10m overspend), the actual depreciation would be \$2.2 for year 5 (compared to the allowed amount of \$2m) and the opening RAB would be \$107.8 for the capex. This means the NSP would still receive a return on a portion of the overspend carried forward but would incur a loss of revenue of \$0.2m in year 5.

The AER proposes that the forecast depreciation be carried forward rather than the actual depreciation. Under the same scenario, if the AER uses forecast depreciation of capex and rolls this forward then for the overspend of \$10m, the NSP would still incur a loss of \$0.2m in the year 5 but the opening RAB would include an amount of \$108m for the capex.

This example shows that when there is an efficient overspend, the RAB rolled forward using forecast depreciation will be greater than if the actual capex was depreciated and then rolled into the RAB.

Consumers are not exposed to what occurs within the regulatory period but they are exposed at the conclusion of the period when the roll forward of the RAB occurs. From the consumer viewpoint, it seeks for the RAB roll forward to be the lowest amount possible, because if the RAB is set higher than is needed, consumers will be paying an unnecessary premium for the life of the asset included by the overspend.

¹⁰ This would be even greater if there was a WACC differential

When looked at this way, using actual depreciation when there is an overspend provides a long term benefit to consumers; using forecast depreciation imposes a long term penalty on consumers.

This means that when using forecast depreciation consumers will be worse off in the long term if there are overspends, but consumers will benefit if there are underspends.

As noted above, the power of the WACC differential is probably much greater than the power of the CESS so the impact of the proposed approach to using forecast depreciation penalises consumers even more when there is a WACC differential when there is an overspend.

As noted above, the risk to consumers is greater when overspends occur and the approach of using forecast depreciation magnifies their risks.

2.4 The ex post review of capex over-runs

The MEU has been a supporter of ex post capex reviews - indeed, as part of the AEMC review of network regulation, the MEU proposed that ex post reviews should be implemented, along with optimisation. Whilst being a supporter, the MEU also accepts that the process for carrying out an ex post review is time consuming and intrusive, and has shown that, in the past, outcomes do not always meet consumer expectations

In principle, the MEU considers that an ex post review can achieve two major outcomes - if implemented efficiently, an ex post review can ensure the minimum amount of inefficient capex is added to the RAB and, at the same time, it provides a dis-incentive on NSPs for implementing inefficient capex due to the intrusive process that is involved.

However, the rule changes made limit any ex post review to excluding inefficient capex only in the circumstance where the NSP has exceeded the capex allowance. This means that an NSP can integrate into the RAB as much inefficient capex as it likes providing it does not exceed the capex allowance.

This constraint results in two critical concerns:

- That the NSP has the ability to force consumers to pay a long term return on inefficient capex providing the NSPs with a dis-incentive to be efficient, and
- The capex allowance can be increased by pass throughs, re-openers and contingent projects limiting the potential for exceeding the capex allowance and therefore reducing the chance that the trigger for further investigation is exceeded.

The outcome of these two concerns is that other actions are required to ensure that the process of ex post reviews minimises the impact of an NSP integrating inefficient capex into the RAB.

Overall, the MEU considers that:

- The trigger for an ex post review needs to be set as a hard trigger. By this the MEU means that the AER should not allow some over-run of the trigger as is proposed. The AER has stated that it will investigate if "the overspend is significant" (a core element of its staged approach). The implication is that the AER will apply a "soft" trigger, allowing some overrun before investigating. In contrast if there was a marginal under-run, the AER has no power to exclude inefficient capex even if the AER is of the view that there has been some inefficient capex. This means that the AER is proposing a biased process in favour of NSPs; one which does not benefit consumers and therefore not in their long term interests.
- The AER should investigate all capex to assess for inefficiencies, even knowing that unless the trigger is exceeded, it cannot prevent the roll in of the inefficient capex. However the knowledge that the AER has identified inefficient capex will provide an incentive for the NSP to minimise such capex in the future (effectively a "name and shame" approach).
- The AER should set the trigger based on the allowed capex less any additions made through re-openers, pass throughs and contingent projects. This will prevent the NSP from inflating the costs for any additional capex¹¹ to prevent the AER from implementing an ex post review. This approach would exclude inefficient capex that could have been excluded in the absence of the added allowances.
- The MEU notes that the ability of the AER to investigate for inefficient capex is impacted by the timeframes allowed - it would appear that the AER could be investigating projects for inefficiency up to some 6-7 years after the event. The MEU considers that the AER needs to implement some processes that allow it to capture inefficient overspends earlier in the time scale so that the information is readily available when the ex post review is formally undertaken.

¹¹ As this additional capex will be costed using a "bottom up" approach, there is an ability for the NSP to overstate its costs for the additional work

3. Comments on the draft Guidelines

Although the MEU recognises that the draft guidelines will improve the ability of the AER to assess past performance of NSPs and to integrate this assessment into the revenue resets that the AER undertakes, the MEU is concerned that there are a number of shortcomings inherent in the draft guidelines. In the preceding sections, the MEU has attempted to explain its concerns and the impacts on consumers should its concerns not be addressed.

The most glaring issue that the MEU has identified is the absence of a guideline to address an incentive for NSPs to seek the lowest cost of debt and to share the benefits of lower debt costs with consumers. The absence of such a sharing scheme has the potential to enhance the benefits NSPs get from a WACC differential and to negatively impact the outcomes of the other incentive schemes, especially the CESS. The MEU is concerned that the decision of the AER not to implement such a sharing scheme will have massive negative impacts on consumers, both in terms of consumers paying unnecessarily higher costs for the services and in weakening (even eliminating) the strength of the incentive schemes.

In the case of the CESS and EBSS, the MEU recognises that the EBSS refinements and the addition of the CESS are intended to implement a more equitable outcome for consumers than has been seen over the past seven years. The MEU considers that the two incentives guidelines reflect the intent of the AER as outlined in the accompanying explanatory statements, although the MEU has noted some significant concerns of the guideline operation, especially of the CESS.

The MEU recognises that the actual implementation of the guidelines will identify where further enhancements are required to ensure that the outcomes reflect the intentions espoused in the explanatory statements. The MEU notes that the AER has not identified a specific time at which the guidelines will be reviewed - the AER notes that it may amend or replace the guideline "from time to time"

The MEU considers the AER is wise to be less than definite in when it might elect to review the guidelines, as the MEU considers that actual implementation will result in more shortcomings being identified than those the MEU has detailed in the preceding sections.