AER Efficiency Incentives Guidelines for Electricity Network Service Providers

Response to Issues Paper

May 2013

Contents

Key Messages

- The Energy Networks Association (**ENA**) has supported, and continues to support, incentive mechanisms which are continuous and symmetrical with the ultimate objective being that networks always have the optimal incentive to invest efficiently at any given point in time.

- The ENA considers that the incentive arrangements need to be based on a clear set of principles drawn from the primary guidance provided to the Australian Energy Regulator (**AER**) with respect to the design and application of its regulatory functions – including the National Electricity Objective (**NEO**), Revenue and Pricing Principles (**RPPs**) and the capital expenditure incentive objective. To this end, the ENA proposes 5 key principles against which efficiency schemes should be examined.

<u>Ex ante capital expenditure incentive mechanism</u>

- A significant weakness of the AER's proposed asymmetrical capital expenditure (**capex**) efficiency sharing scheme (**CESS**) is its over-reliance on expenditure forecast accuracy for what is in fact one of the most difficult elements of the building block to forecast. Capital expenditure forecasts, like all forecasts, will inevitably be imperfect.

- It is the clarity of incentives in driving efficient decisions through time, not performance against an allowance, which is the critical priority for incentive design and application.

    - In setting incentive frameworks under the current National Electricity Rules, what is rewarded or penalised is the difference between actual spend and inevitably imperfect forecasts, not 'efficient costs';

    - It is therefore critical that networks are provided appropriate incentives within a given regulatory period to invest efficiently.

- The AER's proposed asymmetrical CESS would skew over-allowance spending decisions in ways that promote inefficient investment decisions which harm consumers' long-term interests.

- In particular, the ENA has engaged NERA Economic Consulting to investigate the incentive properties contained within the AER's existing and proposed incentive schemes. The NERA analysis shows that the asymmetrical nature of the AER's proposed CESS may provide Network Service Providers (**NSPs**) with:

    - perverse incentives to bring forward or defer capex within and between regulatory periods;

    - perverse incentives when efficiently substituting between capex and operating expenditure; and

    - disincentives to pursue reliability enhancing investment.

- ENA supports a defined and agreed set of principles or criteria for identifying potential exclusions from the CESS, with NSPs left to make the case for exclusions against those principles or criteria at the time of their forecasting methods submissions.

Ex ante operating expenditure mechanisms

- The ENA supports the continued use of the Efficiency Benefit Sharing Scheme (**EBSS**) given that it has worked well to date.

- The ENA has significant concerns around the AER's proposed use of exogenous forecasting techniques, and considers that should it pursue such an avenue then at a minimum the AER should explore how this can be accommodated through adjustments to the opex base year whilst retaining the current EBSS rather than implementing a new EBSS altogether.

Ex post capital expenditure mechanisms

- The AER must provide greater clarity on the steps that it will take in reviewing whether or not a NSP's expenditure above the AER allowance is efficient.

- The AER must set out how the ex post capital expenditure mechanism inter-plays with the ex ante mechanisms for both capital and operating expenditure.

Part A: Response to the Issues Paper

1 Introduction

The Energy Networks Association (**ENA**) welcomes the opportunity to respond to the Australian Energy Regulator (**AER**) Issues Paper entitled *Expenditure incentives guidelines for electricity network service providers* (**Issues Paper**) released in March 2013. Together with the expenditure forecast assessment work stream of the Better Regulation project, the AER's development of appropriate expenditure efficiency schemes will have a significant impact on the commercial drivers for delivery of efficiently timed and scaled network investments to deliver safe and reliable network services at the lowest sustainable cost over the long-term.

The ENA was an active participant in the Australian Energy Market Commission (**AEMC**) rule change process which has led to the current requirement on the AER to prepare and publish a capital expenditure incentive guideline taking into account the new capital expenditure incentive objective. Through the rule change process ENA members advocated for any required rule changes to allow for the introduction of a capital expenditure scheme offering continuous and symmetrical incentives to achieve capital expenditure efficiencies where available throughout and across regulatory periods.

2 Background and scope

The ENA is the peak national body representing electricity and gas transmission and distribution businesses throughout Australia. Energy networks are the lower pressure gas pipes and low, medium and high voltage electricity lines that transmit and distribute gas and electricity from energy transmission systems directly to the doorsteps of energy customers.

Twenty-six electricity and gas network companies are members of the ENA, providing governments, policy-makers and the community with a single point of reference for major energy network issues in Australia. With more than $75 billion in assets and 13 million customer connections, Australia's energy networks provide the final step in the safe and reliable delivery of gas and electricity to households, businesses and industries.

While many of the principles discussed in this issues paper are common to electricity transmission as well as distribution, some aspects of application will differ between the two due to differences in the nature of capital expenditure (**capex**) and services provided. The ENA therefore recommends that the AER develop separate capex incentive schemes for electricity transmission and distribution, as is currently done with the ex ante Efficiency Benefit Sharing Scheme (**EBSS**) that applies to operating expenditure (**opex**).

Grid Australia will provide a separate response to the Issues Paper addressing the design and application of incentive schemes for transmission networks. Therefore, the specific positions discussed in this ENA submission focus on the issues which the AER proposals raise for electricity distribution networks.

3 Guiding objectives and principles

The ENA supports a review of incentive schemes being principles-led, with regulatory policy options being transparently assessed against defined criteria. In this respect, a critical starting point is the guidance provided by the regulatory framework itself including the:

- National Electricity Objective (**NEO**);
- Revenue and pricing principles (**RPP**); and
- Capital expenditure incentive objective.

It is essential that any incentive mechanism is designed having regard to the 'first principles' of good incentive design and regulatory practice. In this regard it is essential that the AER ensures that:

- perceived problems with the current framework are clearly and correctly identified and empirically substantiated;
- the right tool is being used to fix an identified problem; and
- the response is commensurate to the problem, including after all existing mitigations are taken into account.

For example, if the AER thinks that a given network is not subject to robust governance, or is not responding to financial incentives, then first principles suggest that designing financial incentives that apply to all networks is not the optimal tool to address this concern.

a) Incentive design principles

Given the above guiding objectives and principles, the ENA considers that a key first step in carrying out a clear assessment of the many options available to the AER is defining in practical terms the implication of overarching regulatory guidance for the design of incentive schemes. The ENA proposes the following principles to the AER, and has framed its response around these principles.

Principle 1

There should be the ability for a network to earn a commercially appropriate rate of return for all efficient investment made, and thereby meet its financial obligations to debt and equity holders.

Principle 2

There should be incentives to prudently manage capital and operating costs, encouraging a network to implement productive and dynamic efficiencies, and to pass on efficiency gains to customers incrementally over time. This should not incentivise behaviour that results in declining service standards.

Principle 3

The operation of incentive mechanisms and strength and form of incentives must be known by the business in advance, if they are to be effective in driving behaviour.

Principle 4

Schemes should provide incentives that are symmetrical and continuous and thereby do not distort efficient investment or operational decisions, such that Network Service Providers (**NSP**s) always have the optimal incentive to invest efficiently at any given point in time.

Principle 5

The schemes should allow recognition of changing circumstances over the regulatory period. This includes, for example, changes in external cost conditions, obligations relating to safety and reliability, uncontrollable investment drivers and forecasting error in the determination.

Drawing on these principles, the ENA commissioned NERA Economic Consulting (**NERA**) to examine the sharing outcomes and implied rate of recovery under a set of capex and opex scenarios commonly experienced by NSPs. NERA's report entitled "Quantitative Analysis of the Australian Energy Regulator's Proposed Efficiency Incentive Schemes" is attached to this submission (see **Attachment 1**).

NERA's report examines the actual cost recovery and benefit sharing outcomes under the existing regime as well as alternative scheme designs. It tests the extent to which different designs achieve the principles, and are robust to foreseeable expenditure scenarios. The quantitatively assessable criteria that NERA has employed to test the above principles are that the scheme:

- provides continuous incentives for efficient expenditure;
- provides symmetrical incentives for efficient expenditure relative to the ex-ante forecast;
- avoids distortion of decisions between capex and opex; and
- is consistent with the RPP.

Overall, the report suggests that under the existing capex regime, and the AER's proposed asymmetrical CESS, the above principles are not achieved. However, should the AER adopt a symmetrical CESS, or utilise the capital expenditure carryover mechanisms (**CECM**) previously used in Victoria, then the above principles would be achieved.

4 Incentive-based regulation and forecasts

Incentive regulation aims to ensure NSPs face optimal incentives to invest in and maintain their networks at any given point within or across regulatory control periods.

In setting incentive frameworks under the current *National Electricity Rules* (**NER**) what is rewarded or penalised is departures from inevitably imperfect forecasts, not 'efficient costs'. That is, it is an AER determined or agreed forecast that is the final forecast against which an NSP is assessed and incentives are determined.

This means that, unlike businesses that operate in competitive markets, the regulated NSP faces financial penalties or rewards for its performance against an expenditure level which is set by a single economic regulatory body. This often happens well in advance of when the actual investment decision must be made and expenditure undertaken. This central fact should lead regulators to a high degree of caution and inform conservative choices in setting the design and levels of incentives.

Network businesses use robust forecasting methodologies, have responsibility for determining planning and operational decisions, and have considerable expertise in the history and potential of their networks. In reality, no party has perfect foresight. The design of incentive regimes needs to take into account that five year forecasts for any business will not be accurate whether made by the AER or the NSP itself. That is, both the AER and NSPs' forecasts will inevitably be wrong.

This submission uses the AER's terminology 'overspending' and 'underspending' in places for consistency with the Issues Paper. However, the ENA considers a preferable term to use is 'above/below forecast' expenditure. This identifies the concept more neutrally, since common usage of the term 'overspending' suggests spending more than is prudent.

Above allowance expenditure is not, by itself, evidence of imprudence or inefficiency. The regulatory framework, and regulators, recognise that it is not sufficient to simply identify that regulated firms have spent more than a prior forecast in order to establish that expenditure is imprudent or inefficient. This understanding is reflected in the design of the ex post expenditure assessment tool, and the AER's own intended implementation of this mechanism.

5 Ex-ante capital expenditure incentive measures

The ENA considers that:

- There is no evidence of systemic trends of above or below allowance capital expenditure, which means a presumption of inefficient over expenditure is not appropriate and therefore an asymmetrical incentive scheme is unjustified;
- An asymmetrical capital incentive that skews behaviours against spending in excess of the predetermined forecast cannot be consistent with the revenue and pricing principles as it fails to recognise the asymmetrical risk of under-investment;
- There must be recognition of the uncertainty in the current regulatory regime, such that an asymmetrical incentive will likely end up penalising efficient investment;
- The AER should adopt a defined and agreed set of principles or criteria for identifying potential CESS exclusions, and allow NSPs to make the case for exclusion against those principles or criteria at the time of their forecasting methods submissions; and

- The AER should exercise caution in adopting a new and unproven incentive design.

a) No systemic trends for spending less or more of AER allowance

The ENA does not support the AER's asymmetrical CESS which proposes to provide NSPs with a greater penalty for spending more than the AER allowance compared with the benefit from spending less than the allowance.

The AER attempts to justify the asymmetrical nature of the scheme on the basis that it assumes that all instances where a NSP spends less than the allowance reflects an upward bias in the forecast of the NSP. The AER also assumes that all instances where an NSP spends more than the AER allowance reflects a lack of responsiveness of the NSP to financial incentives.

An asymmetrical CESS predicated on these grounds is incorrect, as explained below.

First, the assumption in the Issues Paper that NSPs have an incentive to over forecast costs to help ensure an underspend and a "false" efficiency gain for which it will get rewarded, is offset by:

1. The AER's information gathering powers and the requirement for a NSP's CEO or Directors to sign a statutory declaration that forecasts used in the regulatory proposal are true and correct to the best of their knowledge; and

2. The fact that NSPs must maintain credibility in their forecasting accuracy in order to engage with the regulator over successive periods, and maintain effective long-term relationships with shareholders and financiers.

There is also no evidence to suggest systematic over-forecasting by networks. As one would expect, historical data shows symmetry in outcomes being both above and below regulatory determined allowances. The AER's own research concludes: "*To the extent the capex drivers have been analysed, the conclusions have been varied and tend to point to NSP specific circumstances or characteristics*".[1]

Second, it should be noted that historical evidence on the pattern of capital expenditure in relation to forecasts is critically affected by the features and operation of prior jurisdictional regulatory regimes. In particular, evidence of past 'over' or 'under' spends for distribution networks over the past ten years must be understood in the context of disparate regimes with different incentive frameworks and regulatory requirements. For example:

- IPART was not required to fund its determined building block elements in regulatory pricing decision, consequently IPART frequently set the price path to deliver less than the NPV of the determined building block revenue requirement; and

- Most jurisdictional regulators adopted a forecast depreciation approach to RAB roll-forwards, and for transmission, there was originally an ex post regime, with the ex-ante regime only being applied in the last regulatory period.

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[1] AER, Better Regulation Expenditure incentive guideline issues paper, March 2013, p.12.

These factors make comparisons of 'over' or 'under' spends under varying regulatory frameworks inconclusive. Incremental changes to the current regime and incentives must be assessed against current evidence.

Finally, it should be recalled that the AEMC conducted an extensive examination of whether any systematic evidence of inefficient above forecast expenditure was evident in the past regulatory cycle. The AEMC was specific in highlighting that it could not conclude that past capital expenditure undertaken had been inefficiently high.[2] Instead, the AEMC concluded only that incentives potentially existed for forecasts to be greater than required. As a result of this conclusion, the AEMC included a range of tools into the revised NER to address this, including a package of measures designed to give the AER clearer discretion to challenge regulatory proposals and substitute its own views where it considered forecasts were inflated. It is inconsistent with a recognition of this wider package of rule amendments to rely on unchanged reasoning regarding a possible bias in forecasting and the capacity for inefficient expenditure to occur in justifying a proposal for an asymmetrical CESS.

The ENA considers that a symmetrical CESS is appropriate. The package of new rules removes any possible bias in forecasts (if in fact they occurred) and the introduction of symmetrical CESS should provide sufficient incentive for NSPs to at most incur efficient capex and not be overly penalised for any forecasting error.

b) Asymmetrical capital incentives and the broader regulatory framework

An asymmetrical CESS cannot provide optimal investment incentives, and offends the RPP that an NSP should be provided opportunity to recover *at least* its efficient cost of service. Codifying 'at least' into the RPP reflects policy makers' recognition that the societal cost of under-investment in essential infrastructure is greater than the societal cost of slight over or early investment.

The asymmetry inherent in the AER's proposed CESS is the exact opposite of the intended asymmetry specified in the RPP. If the AER proceeds with this asymmetrical CESS it risks significant societal cost and risks that are inconsistent with the intended operation of the NEL regulatory regime.

A central task of regulating third party access services delivered by monopoly networks is to establish the appropriate incentives for adequate and timely investment and for driving efficiencies in the provision and use of network services.

In establishing forward looking incentives for operating and capital programs for a period of effectively more than 5 years in advance, particular emphasis needs to be given to enhancing incentives for dynamic efficiency gains, which over time in most industries contain the most significant potential to drive lower costs or improved service delivery.

The long-term costs to customers of less than efficient or more than efficient levels of capital investment are asymmetrical. The consequences of under-investment (in the form of

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[2] AEMC, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper, 29 November 2012, Sydney, p. 33.

deteriorating service quality and expensive future catch-up investments) are likely to be more costly than the cost of some investment happening sooner than it should. The cost conditions for natural monopoly facilities are such that the prospect of under-compensation can lead to non-provision of services. In contrast, over-compensation does not.

This asymmetry of risk is not only the basis for the RPP, but it has unsurprisingly also been recognised by:

- the AER Chairman, in his address to the November 2011 AEMC public forum on the 'Economic Regulation of Network Service Provider's' rule change:[3]

> …it is recognised that the economic cost of under-investment in services is greater than the economic cost of a small over-investment. This asymmetry is well understood in regulatory economics and is key to the deliberations of regulators.

- Professor George Yarrow, an advisor in the *Economic Regulation of Network Service Providers* review process:[4]

> …the most basic problem is one of potential underinvestment, at least in a context of regulation of privately owned or financed networks by a regulatory agency with discretion to choose its preferred, price-setting methodology.

- The Productivity Commission (**PC**) in its review of the national access regime:[5]

> The paramount concern is the potential for access regulation to deter investment in essential infrastructure.
>
> […]
>
> Nonetheless, the Commission accepts that there is a potential asymmetry in effects:
>
> - Over-compensation may sometimes result in inefficiencies in the timing of new investment in essential infrastructure (with flow-ons to investment in related markets), and occasionally lead to inefficient investment to by-pass parts of a network. However, it will never preclude socially worthwhile investments from proceeding.
>
> - On the other hand, if the truncation of balancing upside profits is expected to be substantial, major investments of considerable benefit to the community could be forgone, again with flow-on effects for investment in related markets.
>
> In the Commission's view, the latter is likely to be a worse outcome

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3 AER Chairman's address (published transcript), AEMC public forum, 23 November 2011.

4 Professor George Yarrow, Preliminary views for the AEMC, p. 2. Provided as Part of: AEMC, Economic Regulation of Network Service Providers, Directions Paper documents.

5 Productivity Commission, Review of the National Access Regime, Inquiry Report No. 17, 28 September 2001, p. xii.

c) Incentive design must account for unforeseen and uncontrollable events

The AER must recognise the uncertainty in the current regulatory regime, such that an asymmetrical incentive will likely end up penalising efficient investment. The ENA considers that NSPs are not sufficiently protected from unforeseen and uncontrollable events, in particular given the very high materiality thresholds that apply to the uncertainty mechanisms. For example, for distribution networks:

- Cost pass through events: a defined list of NER events as well as nominated events in individual regulatory decisions. The AER has specified a materiality threshold of one per cent of the smoothed forecasted revenue;

- Reopening provisions: per clause 6.6.5 of the NER, a NSP can apply to the AER to revoke or substitute a distribution determination where an event that is beyond the reasonable control of the NSP has occurred. The materiality threshold is 5 per cent of the value of the Regulatory Asset Base (**RAB**) in the first year of the control; and

- Contingency events: per clause 6.6A of the NER, the AER can amend a distribution determination to include capex associated with a contingent project (an event that was considered unlikely to occur during the regulatory period) that is now required following a trigger event. The materiality threshold for a contingency event is $30 million.

The capital incentive design should recognise this uncertainty and its potential impact on efficient investment by:

- Not imposing asymmetrical penalties with a higher penalty for spending greater than the AER allowance relative to the benefit for spending less than the allowance;

- Allowing NSPs to propose incentive mechanism exclusions on a case-by-case basis;

- Ensuring capex associated with approved contingent projects or pass through events is not penalised through the CESS; and

- Ensuring that above allowance expenditure which is subsequently deemed to be rule compliant upon AER's ex post review, is not unduly penalised through the CESS.

d) Incentive scheme exclusions

The ENA considers it is premature to propose a full list of capex categories that would be excluded from the AER's proposed CESS at the time of this guideline. However, the ENA considers that the guideline should set out defined principles for identifying potential CESS exclusions, and allow NSPs to propose exclusions that meet those principles at the time of their forecasting methods submissions.

The ENA suggests CESS cost exclusion principles which could be incorporated in the AER's guideline may refer to:

- capex that is associated with contingent projects, pass-through events or re-openers;

- particular costs are outside the NSP's control, including having regard to jurisdiction specific operating obligations and constraints; and

- failure to exclude the costs would distort the intended incentive properties of other parts of the regulatory regime applied to that NSP.

The ENA's proposed approach to allowing NSPs to propose exclusions to meet the principles when submitting forecasting methods is similar to that currently used for the EBSS. By assessing NSP-specific exclusions under the CESS, the AER will be in the best position to recognise the diverse operating environments and different jurisdictional technical regulatory requirements that affect NSPs. There are many examples of diverse circumstances that such principle-based flexibility could better accommodate than would a 'one size fits all' approach. For example:

- The Service Target Performance Incentive Scheme (**STPIS**) for DNSPs in Victoria whereby reliability improvement capex is not funded on an ex ante basis, but rather is incentivised through STPIS rewards within period and then rolled into the RAB on an ex post basis—such expenditure would be deemed inefficient under the AER's current CESS design; and

- Capital investment in demand management technologies or non-network alternatives. For example, installing high capacity conductors in order to minimise distribution loss factors.

The ENA notes that using exclusions from the incentive schemes will affect the level of risk NSPs face for expenditure above benchmark, and the opportunities they will have in relation to savings from benchmark. More generally, the removal of capex from the operation of the CESS will mean that there is a smaller amount of money at risk, but also that there is less diversification of risk (e.g. if growth effects are removed, this is not available to balance input price rises or unavoidable growth in other areas of the capital program).

e) Incremental change is preferable amid uncertainty

The AER should exercise caution in adopting a new and unproven incentive design. Consistent with allowing tailoring of the capex incentive for individual NSPs, the AER should also consider allowing NSPs to propose a simplified capital incentive mechanism for distribution networks in this first round of regulatory reviews. Where proposed, this may allow the mechanism to be proven, and for refinements to be made on the basis of experience.

The CECMs formerly applied in South Australia and Victoria[6] may provide such a viable alternative, given that they:

- are shown by the NERA quantitative analysis to better support intended incentive design principles compared to the AER's proposed asymmetrical CESS when tested under a

[6] ENA understands that there were slight differences in the schemes, in particular that the Victorian scheme used forecast depreciation whereas the South Australian scheme used actual depreciation.

range of scenarios, primarily because they were symmetrical and offered equivalent sharing to the EBSS;

- avoid the need to separately determine a benefit sharing target; and
- are known to a number of NEM participants and, by virtue of their simple design, are more readily explained to stakeholders for the purpose of aiding understanding and thereby motivating desired behaviour.

Under this approach, the financing cost benefit or penalty on the above or below allowance capital expenditure would be carried over for five years. This would achieve a continuous efficiency incentive and align the capex benefits sharing with the equivalent opex benefits sharing achieved through the current EBSS.

6 Ex-post capital expenditure measures

The ENA agrees with the AER that the primary focus should be on appropriate ex-ante investment incentives. The AER should continue to rely on the ex-ante capex measures in providing incentives for NSPs to achieve efficient costs.

In relation to assessing inefficient capex above the allowance, the Issues Paper identifies at stage two that the question is: 'are overspends minor?'. Similarly, at its workshops, the AER has indicated that the purpose of the ex-post capex measures is to target 'significant' overspends. The ENA consider that the AER must provide greater clarity on how it would define 'significant' versus 'minor', as this is likely to be an important factor for any NSP in deciding whether or not to undertake efficient capex that is above the AER allowance. A lack of clarity on how the AER will apply an ex-post review may have a chilling impact on efficient investment.

In considering expenditures ex post, it is essential that the AER makes its decision based on the information the NSP had at the time of the investment, and not with the benefit of hindsight.

In submissions to the AEMC's rule change consultation, the ENA suggested that the NER need to allow for any disallowed capex to be carried forward where capex is subsequently used and useful. This would afford equivalent protection to that provided under the speculative capital expenditure account provisions of the National Gas Rules. The AEMC did not accept the suggestion but went on to say that:

> *"[when undertaking an ex post review of capex] the AER could take into account the extent to which it expected capex to later become used and useful in determining the amount of any reduction to capex to go into the RAB if it wished to do so. The AER should set this information out in its capex incentive guidelines."*[7]

The ENA would like to see this information included in the guideline.

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[7] AEMC, Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper, 29 November 2012, Sydney, p. 136.

The AER must also clarify its proposed process for making its statement of efficiency for capex entering the RAB, which it is required to do under the NER regardless of whether the NSP has overspent or not.

Finally, the AER must set out how the ex post capex and ex ante capex and opex mechanisms inter-relate, in particular:

- How capex that is excluded from the RAB roll-forward is also removed from the CESS, to ensure the penalty is even and does not exceed the cost to society from the overspending. This is further discussed in scenario 6 of the attached NERA paper;

- How capex that is removed from the RAB roll forward on the basis that is an inflated related party margin is also removed from the CESS; and

- How capex that is excluded from the RAB roll-forward on the basis of a change in capitalisation policy is also removed from the EBSS.

7 Ex-ante operating expenditure measures

The AER Issues Paper proposes two ex ante opex incentive schemes:

- where a NSP's opex allowance is set on the basis of revealed costs, the AER would continue to apply the existing EBSS; and

- where a NSP's opex allowance is set on the basis of a benchmark, then the AER would apply a new opex scheme.

In the ENA's view, the revealed costs approach to setting opex allowances and the current EBSS design should be the default. This would be consistent with the AER's stated primary reliance on ex-ante capex incentives to motivate efficient capital investment.

The AER's foreshadowed move to potentially using exogenous benchmarks to set opex allowances for some NSPs is significant, and will materially alter efficiency incentives and the sharing of efficiency benefits. It also appears to be a more material shift than the AEMC anticipated in making the Economic Regulation of Network Service Providers rule change, which reaffirms benchmarking as just one of a number of expenditure factors to which the AER must have regard.

Should the AER persist with using benchmarks in a deterministic way, then it must set out its proposed criteria to determine whether or not the NSP will have its opex allowance forecast based on the revealed cost or benchmarking processes. This is a critical element of uncertainty in the AER's proposed regime, and it will be important for NSPs to understand how they are likely to be treated.

In this context, NSPs must also be afforded an opportunity to understand the quantitative benchmarks against which they will be assessed prior to those benchmarks being used in a deterministic way. The ENA notes that to date, benchmarking discussions with the AER have centred on the theory and technical specification of benchmarking options. Absent details of the quantitative outcomes of such benchmarking and consideration of a business's governance, policy and practices, NSPs cannot make behavioural change by reference to

benchmarking. Similarly, unless there is consensus on the validity and robustness of benchmarking results, any intended incentive for behavioural change may be eroded.

The ENA notes that even where the AER seeks to adopt exogenous benchmarks to set opex allowances, it should explore how this can be accommodated through adjustments to the opex base year whilst retaining the current EBSS rather than implementing a new EBSS altogether. Such adjustments have been the AER's practice to date where it has adjusted NSPs' revealed opex costs prior to relying upon them for forecasting.[8]

Given that the NSP will not be aware of the relative position of their cost profile to the yet to be published quantitative benchmarks, transitional arrangements or glide paths should be established to smooth the impact of the change in cost basis and incentive or penalty payments.

This is particularly important given that the use of exogenous benchmarks has not yet been tried or tested; therefore there is a genuine risk that the AER benchmark opex may be unsustainably low. The ENA expects the AER to outline its method to validate the benchmarking models it proposes to use, and the method by which it will establish confidence intervals on the results.

[8] In the 2011-15 Victorian distribution price review the AER adjusted certain costs out of Jemena Electricity Networks' opex base year and consistently applied these adjustments to the actual costs used for the purpose of calculating EBSS rewards.

Part B: Responses to the Issues Paper Questions

Ex ante measures for capital expenditure

Question 1

Do stakeholders agree with the issues that we have identified about declining incentives for efficient capex? Are there any other issues that could arise from declining incentives for efficient capex? If so, what are these?

The issue of the potential for declining incentives for capital expenditure across a regulatory period was widely identified through the AEMC *Economic Regulation of Network Service Providers* rule change review process. In the rule change, the AEMC provided a range of potential tools and mechanisms to enhance incentives in the NER, including further guidance on the development of a capital expenditure incentive scheme.

There are a variety of practical constraints to how regulated firms might respond to the theoretically declining incentives under existing arrangements. These can be expected to serve to mitigate the actual occurrence of inefficient capital expenditure later in the regulatory period. As an example, network businesses operate with asset management programs involving capital expenditure plans which span multiple regulatory periods. In additional, at a project level, the investment program for the initial years of a regulatory period is often known with greater certainty than is investment at the end of a regulatory period, and includes approved business cases and committed projects. In practice, the capacity of a regulated firm to move such projects to other time periods may be significantly constrained.

It is clear from the AER's own analysis that the presence of any declining incentive has not driven any systemic pattern of spending above or below capital expenditure forecasts.[9] As the AER notes, there is no clear or continued trend or pattern when networks across Australia are examined. This is consistent with networks experiencing a range of demand and cost conditions that were not reflected in original forecasts. Other evidence the AER presents is also consistent with the practical reality that the final years of a regulatory period are the time period in which forecasts are logically most likely to be affected by cumulative errors or imprecision.

These factors support the adoption of a simple, targeted and proportionate regulatory incentive scheme to ensure continuous ex ante incentives through time to achieve capital expenditure efficiencies. By contrast, the development of a complex asymmetrical scheme which introduces incentives for inefficient deferral or fails to incentivise investments being made at an optimal time for energy consumers, would not be an appropriate response to this area of concern.

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[9] See Attachment 2, AER Better Regulation Issues Paper – Expenditure incentive guidelines

Question 2

Do stakeholders support our initial view that any capex sharing scheme should provide continuous incentives in each year of a regulatory control period? Please give reasons to support your view.

The ENA agrees that the existing regime should be modified to provide the same power of incentive across the regulatory period. In this way, the network would have a continuous incentive to achieve efficiencies when they arise. In the absence of continuous incentives, network will have an inherent incentive to alter the timing of expenditure so as to minimise financial penalties.

Question 3

Do stakeholders support our initial view that any capex sharing scheme should provide a reward for underspending of between 20 and 30 per cent? Please give reasons to support your view.

The ENA does not consider that the reward for spending less than the AER allowance should be lower than the penalty that applies for spending above the AER allowance.

The AER considers that the reward for underspending should be between 20 and 30 per cent which is broadly in line with the average incentive provided under the current regulatory regime.[10] The AER also argues that the reward for underspending should be limited:

- To minimise the scope for NSPs to under invest to the detriment of service levels; and
- To limit the scope for NSPs to capitalise opex or substitute opex to capex.

In relation to the first point, the ENA agrees that there is a lag between changes in capex and any consequent change in service levels, and that a very strong incentive may provide NSPs with a perverse incentive to cut back on expenditure which may lead to a decline in service quality that is not in the long term interests of customers.

However, the second point supports an argument that the reward for spending less than the AER allowance should be broadly similar between the EBSS and a CESS. Furthermore, the analysis conducted by NERA highlights the perverse incentives of a highly asymmetrical CESS scheme where there is a greater penalty for spending above the AER allowance relative to the reward for spending less than the AER allowance. This is discussed further in response to question 4 below.

[10] AER, *Better Regulation: Expenditure incentives guidelines for electricity network service providers*, Issues Paper, March 2013, page 16.

Question 4

Do stakeholders agree with our initial position that the penalty for overspending should be greater than 30 per cent? Please give reasons to support your view.

The ENA does not support an asymmetrical CESS where there is a greater penalty for spending more than the AER allowance compared with the benefit from spending less than the allowance. This is because the AER's proposed asymmetrical CESS cannot achieve appropriate incentives for efficient investment within or between regulatory periods. As such, it will inevitably result in a scheme which distorts both investment timing and the nature of investments made, and fails to accord with the revenue and pricing principles in the National Electricity Law.

ENA has commissioned NERA to assess the impacts of the AER's proposed asymmetrical CESS, which it compares to the existing capex regime where the capex is rolled straight into the RAB, the CECM previously used in Victoria, and a symmetrical CESS.

First, NERA considered the scenario of a shift of capex (either a deferral or advancement) within a regulatory period (scenario 1). NERA finds that:

- Under the existing capex regime, a NSP will obtain 100 per cent of the benefit or cost to society from a deferral or advancement, respectively;
- Under the CECM or a symmetrical CESS, the NSP will share around 30 per cent of the benefit or cost to society from a deferral or advancement, respectively; and
- Under the AER's proposed CESS, the NSP will share 30 per cent of the benefit to society for a deferral of costs, whereas it will share 70 per cent of the cost to society from an advancement of capex within the regulatory period.

The benefit or cost to society is calculated as the Net Present Value (NPV) at the end of the regulatory period of the difference between the actual capex and the forecast capex per the AER allowance in each year of the regulatory period. The NSP share of the societal benefit or cost is calculated with reference to differences in the actual depreciation rolled into the RAB and the depreciation that was calculated in the AER allowance, as a proportion of the total society benefit or cost.

Second, NERA also considered a scenario where the NSP defers capex from the first regulatory period to the second, or brings forward capex into the first regulatory period that it intended to spend in the second period (scenario 2). NERA finds that:

- Under the existing capex regime, a NSP may obtain a benefit or penalty from a deferral, depending on the timing of the expenditure. For example, the NSP would obtain the benefit of a deferral in the first period via the return on capital included within the AER allowance, however the assumed overspend in the second period would result in a penalty to the NSP from the return of expenditure not being included in the AER allowance. The overall benefit or penalty to the NSP may be greater than the benefit or penalty to society from the shift in the timing of spending the capex;

- Under the CECM or a symmetrical CESS, the NSP will share around 30 per cent of the benefit or cost to society from a deferral or advancement, respectively; and

- Under the AER's proposed CESS, a NSP may obtain a benefit or penalty from a deferral, depending on the timing of the expenditure. For example, the NSP will obtain a reward of 30 per cent for spending less than the allowance in the first period, but this may be outweighed by the penalty of 70 per cent in the second period for spending more than the allowance. The overall benefit or penalty to the NSP may be greater than the benefit or penalty to society from the shift in the timing of spending the capex.

Third, NERA considered a scenario where a DNSP overspends during a regulatory period to improve network reliability. In this case, the combined incentive to a DNSP will depend upon the benefit associated with the STPIS, offset by the penalty incurred through the capex incentive scheme. NERA finds that:

- Under the existing capex regime, the CECM and a symmetrical CESS, the DNSP would pursue the reliability related investment as the STPIS benefit outweighs the penalty; and

- Under the AER's asymmetrical CESS, the penalty to the DNSP may not outweigh the benefit received under the STPIS and so the DNSP would be unlikely to pursue the reliability enhancing investment.

Overall, the results of the NERA Report confirm that the asymmetrical nature of the AER's proposed CESS can result in outcomes where:

- a socially beneficial deferral by a network can result in a financial penalty to the network;

- the penalty imposed on a network from the bringing forward of expenditure will exceed the additional costs to society of the brought forward expenditure;

- the reward or penalty to the network arising from the shift in expenditure between periods varies according to the timing of the change in expenditure; and

- the proposed higher penalties for above forecast capital expenditure will dilute incentives from the STPIS mechanism to make reliability enhancing investments of benefit to consumers.

For the reasons outlined in Part A of this submission these outcomes are not consistent with:

- long term interests of consumers as described in the *National Electricity Law* objective;

- the revenue and pricing principles (for example, NEL s.7A (2), (3) and (6)); and

- the capital expenditure incentive objective.

Due to the complexities and poor incentives for network investment and operation decisions created by an asymmetrical scheme, the ENA does not support the AER's proposed asymmetrical CESS. The ENA considers that the AER should consider simpler alternatives to its proposed scheme to avoid the perverse incentives outlined above.

Question 5

Do stakeholders agree with our initial position that one capital expenditure sharing scheme should apply to all NSPs? Please give reasons to support your view.

The ENA considers that there is merit in allowing tailoring of the capex incentive scheme. The DNSP STPIS guideline provides a good example of the relative balance between prescription and scope for tailoring.

Ideally the guideline would set out the mechanics of the available schemes at a relatively detailed level to provide certainty to NSPs before the regulatory determination process commences. The applicable scheme and approved exclusions or adjustments for a given NSP would then be affirmed in the framework and approach paper for that NSP.

It is critical that any available schemes are outlined in sufficient detail for the network business to be in a position to calculate with reasonable accuracy the incentive power and sharing ratio which would apply from the commencement of the new regulatory period, should this approach be adopted, as well as the way it would treat existing and past investment decisions.

The scheme should also explicitly allow a NSP to propose variations to the application of the scheme as part of its forecasting methods proposal, to account for firm's individual circumstances (for example, the potentially different exclusions to apply on a jurisdictional basis depending on differences in how reliability expenditure is funded via STPIS or other approaches). These variations would need to satisfy defined principles as the ENA has proposed in section [5d]. The AER would then make a determination on whether it accepts the proposed variations to the scheme having regard to the stated principles for exclusion or adjustment.

ENA considers that enabling a network to propose variations has the following benefits. It would:

- ensure consistency with the NER (for example, clause 6.12.1), which requires the AER to make a constituent decision on how any applicable capital expenditure sharing scheme is to apply to the network. This makes clear that the AER has an obligation to consider whether the scheme needs to be applied in a different way;

- enable a network to provide evidence why the nominated scheme does not account for its individual circumstances. Our response to Question 6 nominates criteria that could be used to assess whether there are grounds to apply the scheme differently to a DNSP; and

- enable a 'quick fix' of arithmetic or other errors in the scheme, without requiring the AER to undertake an immediate consultation on the changes.

Question 6

If we were to tailor different schemes for individual NSPs, what criteria should we use to differentiate between NSPs?

The ENA considers it is both appropriate and desirable to allow tailoring for individual NSPs, where such tailoring is developed to be consistent with agreed criteria.

Proposed variations may include changes to the sharing properties of the scheme, nominating specific uncontrollable categories to apply, and caps on the penalties/ rewards to apply. The reasons for variation would relate to the individual circumstances of the network and may include a non-exhaustive list of reasons why it would be appropriate to apply the scheme differently to a network:

The ENA suggests the following criteria:

- NSP-specific exclusions should be considered where:
    - particular costs are outside the NSP's control, including having regard to jurisdiction specific operating obligations and constraints; and
    - failure to exclude the costs would distort the intended incentive properties of other parts of the regulatory regime applied to that NSP.
- Incentive rates should be:
    - Sufficient to motivate the individual NSP; and
    - Provide equal incentives across capital and operating expenditure
- Incentive design should allow a given NSP a reasonable opportunity to recover at least its efficient costs.

Question 7

Are there any categories of capex that should not be covered by a capital expenditure sharing scheme? Why?

The ENA agrees that there may be some forms of investment which are more discretionary than others; however, there may be practical difficulties to identify categories of capex that should be excluded from the scheme at a guideline level for all NSPs, given:

- differences in interpretation of definitions for classification of investment categories; and
- capital expenditure projects may have multiple drivers.[11]

Therefore, the ENA considers it is premature to propose or agree a list of capex categories that would be excluded from the AER's proposed CESS at the time of this guideline.

Instead, as discussed in section [5d], the ENA considers that it is preferable that the guideline defines an agreed set of principles or criteria for identifying potential CESS exclusions, and leave it to NSPs to make the case for exclusion against those principles or criteria at the time of their forecasting methods submissions.

The ENA suggests two key CESS cost exclusion principles, namely that:

- the particular costs are outside the NSP's control, including having regard to jurisdiction specific operating obligations and constraints; and
- failure to exclude the costs would distort the intended incentive properties of other parts of the regulatory regime applied to that NSP.

Question 8

When, if at all, might it be appropriate to make adjustments to a type of capex before applying a CESS? Why?

Please see response above to question 7.

Question 9

Do stakeholders agree with our initial position to apply a continuous asymmetric capex scheme with higher penalties for overspending than rewards for underspending? Please provide reasons.

The ENA does not agree with the proposal to apply an asymmetrical capex efficiency sharing scheme with higher penalties for overspending than rewards for underspending.

The AER proposes the asymmetrical scheme to address its concerns regarding "overspending" by some NSPs. However, the AER paper does not suggest that overspending should be a major concern, given that the AER correctly noted:

> *"….there are a number of reasons why actual capex could differ from capex allowances. Without undertaking further analysis on the underlying capex drivers for each NSP, it is difficult to draw any strong conclusions from the data. To the extent that capex drivers have been analysed, the conclusions have been varied and tend to point to NSP specific circumstances or characteristics."*

Furthermore, the asymmetrical scheme is not supported by the following matters:

- The AER forecast capex allowance will inevitably be imperfect – see section 4;
- Spending above the AER allowance is not necessarily evidence that the expenditure is imprudent or inefficient – see section 4;
- There is no systemic trend for under or over-spending – see section 5a;

- The societal cost of under-investment is greater than the societal cost from over or early investment – see section 5b;

- The AER must recognise uncertainty in the regime from unforseen and uncontrollable events and the associated high thresholds - see section 5c; and

- The proposed application of a higher penalty for "overspends" through the CESS may result in perverse incentives to NSPs regarding the timing of spending capex – see response above to question 4.

On the basis of the above, the ENA does not support the AER's proposed asymmetrical CESS.

Question 10

Do stakeholders agree with our initial position that the penalties and rewards for a capex scheme should be included in the guidelines rather than determined as part of a determination? Please provide reasons.

As noted above, the ENA considers it is desirable to allow tailoring of capex incentive rates for individual NSPs. However, this tailoring must be known at the time an NSP submits its regulatory proposal to provide certainty of investment scope and risk at the time the investment proposal is submitted.

To achieve this tailoring, the ENA recommends the following process:

- the capital expenditure incentive guideline sets out the principles and caps relevant to setting incentive rates;

- the NSP nominate its proposed capex incentive mechanism tailoring in its forecasting methods submission;

- the AER's framework and approach confirms the applicable incentive mechanism and incentive rates; and

- the NSP's proposal can be developed and submitted having regard to the applicable incentive mechanism and resulting incentive rates and risk.

Question 11

Do stakeholders agree that forecast depreciation should be the default form of depreciation used to roll forward the RAB except where there is no capex sharing scheme in place or where there is persistent overspending by a NSP?

Most members of the ENA agree that if the CESS scheme were to apply, forecast depreciation should be used as a default for rolling forward the asset base. If actual depreciation were to be used, the level of financial penalty for spending more than the AER allowance would be even higher than with forecast deprecation.

NERA has undertaken analysis to assess the differences in incentives to a NSP that result from an unanticipated overspend of capex relative to the AER allowance in any year of a regulatory period, given different depreciation methodologies (see scenario 5).

Using forecast depreciation, NERA finds that with the AER's proposed asymmetrical CESS; a symmetrical CESS; and the Victorian CECM mechanisms, each delivers the NSP the same proportion of the net costs to society from the overspend in each year of the regulatory period. That proportion is generally equal to the penalty set within the scheme to apply to capex spent above the allowance e.g. in the case of the AER's proposed asymmetrical CESS, the NSP would share 70 per cent of the net cost to society resulting from the overspend.

In contrast, the use of actual depreciation provides the NSP with a much greater share of the net costs to society from the overspend, and this varies depending on the year that the overspend takes place as well as on the life of the underlying asset. For example, using the AER's proposed asymmetrical CESS with actual depreciation, should an NSP spend $29 million more on capex than the AER allowance on an asset with a 5 year life in the first year of the regulatory period, then the NSP shares 133 per cent of the cost to society from the overspend (i.e. it over pays the cost) and customers share -33 per cent of the cost (i.e. customers actually receive a benefit).

Question 12

Do stakeholders agree with the factors that we have identified for consideration in determining whether to apply forecast or actual depreciation?

The ENA broadly supports the premise that if the AER were to apply high powered incentives, it should only use forecast depreciation to roll forward the asset base.

Ex ante measures for operating expenditure

Question 13

If we continue to use a revealed cost approach to forecast opex, should the same EBSSs remain largely in place, or are more significant changes required?

A key feature of the regulatory framework is the reliance on incentives to drive efficient behaviour. The EBSS is an important part of this incentive-based framework and can only do its job where there is certainty and predictability about its application on an ex ante basis.

An EBSS design that is not locked in advance of its application to set rewards and penalties is not an ex ante measure.

The ENA supports the continuing use of a revealed cost approach to forecast operating expenditure, and therefore considers that the AER should retain the current operating expenditure EBSS. As explained by the AER, the EBSS has been designed to complement the revealed cost operating expenditure forecasting approach.

The ENA considers that the current EBSS has the important features of being symmetrical and also providing continuous incentives over a regulatory period.

The ENA agrees with the AER's preliminary assessment that where the EBSS has been in place it is operating as intended providing long term benefits to customers. The EBSS has proven effective in that it has resulted in NSPs revealing their underlying efficient costs and has reduced the cost of opex assessment. For some jurisdictions, a mechanism similar to the EBSS has been in place for as many as four regulatory control periods and the evidence of cost reductions is clear.

Question 14

Does an incentive power of 30 per cent provide a sufficient incentive to achieve efficiency gains?

Broadly, the ENA considers that a 30 per cent incentive power has proven to be effective in driving operating cost efficiencies over the past decade of operation.

It is noted that the '30:70' ratio arises principally as a mechanistic function of prior decisions to allow for the financial benefits of efficiencies to be retained for 5 years before being passed to consumers. As such, it is not a result of an independent empirical assessment of what quantum of incentive power is required or appropriate. One of the issues which this creates, which is a reason for allowing for network specific variations on a broad proposed mechanism, is that in some cases networks and the regulator may come to a shared view that differently powered incentives are appropriate. For example, a 30:70 benefit sharing ratio provides a relatively weak incentive for frontier NSPs to strive for further efficiencies, and therefore it may be desirable to provide a higher incentive for such NSPs. NSPs at or near the efficiency frontier have already achieved the efficiencies associated with "low hanging fruit", and thus must undertake a higher degree of risk to obtain further efficiencies. This is relevant to the balance between expenditure incentives and service provision. It is also consistent with the inherent short term tension between productive and dynamic efficiency. The ENA notes that the national electricity objective is unequivocally targeted at the latter.

Should the AER pursue the use of benchmarking for deterministic purposes, then it will also significantly alter the power of the incentive to a firm. The AER recognises this by noting "the total benefits that a NSP receives will depend on how its opex compares to the new benchmark".[12]

NERA has also considered the relationship of the benchmark used to set the opex allowance to the actual opex of the NSP, and the impact of this on a permanent reduction in opex by the NSP. NERA considers the impact of the permanent reduction in opex where:

- the allowance for a regulatory period is determined 100 per cent exogenously i.e. actual expenditure by the NSP in the previous period has no influence on the allowance, and
- the allowance for a regulatory period is determined 50 per cent exogenously i.e. the allowance is determined by an equal weighting of an exogenous amount and the expenditure in the previous period.

[12] AER Issues Paper, page 30.

NERA finds that:

- where the allowance is determined 100 per cent exogenously, the NSP's benefit share will reflect the target incentive rate of 30 per cent contained in the EBSS; and

- where the allowance is determined 50 per cent exogenously, the incentive rate to the NSP will fall to 19 per cent, which is below the target incentive rate.

More generally, NERA finds that as the benchmark used to set the opex allowance for a regulatory period becomes more dependent on the actual expenditure of the NSP, the NSP's benefit share falls.

Question 15

Are there any circumstances where balancing the opex incentive with the capex and service level incentives may not encourage economic efficiency?

The opex, capex and service level schemes are all related, such that a change in one scheme impacts the others.

The ENA has engaged NERA to consider the circumstance where an NSP substitutes between capex and opex. NERA notes that in principle, an NSP will substitute between opex and capex to the point where it becomes indifferent between the two. This ensures that a business undertakes activities that lower the total overall cost of the providing network services, irrespective of the label attached to the type of expenditure involved.

NERA compares the shifting of expenditure between the EBSS and each of the existing capex regimes, the CECM and the AER's proposed asymmetrical CESS (scenario 7). NERA finds that the highly asymmetrical CESS may create inappropriate incentives for an NSP considering substituting between capex and opex.

Therefore the AER must ensure that its approach to the various schemes is balanced so that networks' incentives are not distorted.

The AER should also consider the interplay of the opex, capex and service level incentives with that for demand management or other new incentive schemes.

Question 16

Do stakeholders agree the EBSSs should provide a continuous incentive in each year of a regulatory control period? Are there any circumstances where a continuous incentive may not encourage economic efficiency?

The ENA agree that the EBSS should be continuous such that the NSP is indifferent to when an efficiency is generated.

Question 17

Do stakeholders agree the EBSS rewards and penalties should be symmetrical, regardless of the forecasting approach?

The ENA agrees that the EBSS rewards and penalties should be applied through a symmetrical mechanism, with the incentive rates determined for a given NSP at the framework and approach stage.

It is important to note, however, that the rewards and penalties are not entirely symmetrical if the AER in its determination applies an additional productivity factor over the regulatory period in a revenue determination. Where this practice is adopted, the revenue allowance already includes an embedded "productivity factor" which assumes operating cost efficiencies relative to historical operating cost levels, and the benefit of these assumed efficiencies are entirely passed on to consumers. A NSP only receives rewards when its actual opex is below the forecast operating costs, where the latter already assumes efficiencies.

Question 18

Should uncontrollable costs be excluded from the operation of the EBSSs?

The current EBSS allows NSPs to propose a range of cost categories for exclusion, which may be justified as uncontrollable costs. The ENA considers that the exclusion of nominated uncontrollable costs is appropriate, and that the EBSS Guideline should be clear that such costs can be excluded on this basis – the ENA can see no reason that the current guidelines suggest that a cost category should not be excluded if the cost relates to an ongoing business activity.[13]

These costs are excluded from the both the base year and the carry-over, and these costs are defined at the time of the networks determination. This provides required certainty to the members of the ENA, and therefore the ENA see no reason to change this.

Question 19

Should the approach to addressing uncontrollable costs differ depending on the forecasting approach?

Costs that the network cannot control should be not considered in any efficiency assessment process.

Question 20

Are there any other reasons to exclude costs from the operation of the EBSSs?

The ENA maintains that the principles for exclusions should be that the expenditure is either:

[13] Per AER, *Electricity distribution network service providers: Efficiency benefit sharing scheme*, Final decision, June 2008, Appendix E, page 6.

- particular costs are outside the NSP's control, including having regard to jurisdiction specific operating obligations and constraints; or

- failure to exclude the costs would distort the intended incentive properties of other parts of the regulatory regime applied to that NSP.

The AER Issues Paper is unclear where it discusses the effect of excluding costs from the EBSS on the basis of benchmarking. The ENA will continue to consider the AER's recent further publications on this transitional issue, and will respond to the questions raised in that material.

Question 21

Should the EBSSs define specific costs to be excluded from its operation? If yes, which costs should be excluded from the scheme? If no, should criteria be defined which would guide which costs would be nominated as excluded costs?

The ENA considers that it would be reasonable for the AER to set out the criteria to guide which costs should be nominated by the network as excluded costs.

Question 22

Should all excluded cost categories be determined prior to the commencement of the regulatory control period in which the scheme applies?

For regulatory certainty, all excluded cost categories should be set out in the regulatory determination prior to the commencement of the regulatory control period in which the EBSS scheme applies.

Question 23

Should the EBSSs provide greater flexibility as to how opex forecasts are adjusted for the purposes of calculating rewards and penalties under the scheme?

The ENA considers that the current level of flexibility as to how the opex forecasts are adjusted should be maintained in the EBSS.

Ex post measures for capital expenditure

Question 24

Do stakeholders agree with having a staged approach to the ex post review?

The ENA agrees that a clearly articulated and staged approach to conducting *ex post* reviews best delivers a review process which is predictable, efficient, proportionate, and transparent to all stakeholders.

The proposed approach in Issues Paper *Figure 5.1* sets out a number of stages and conditions for movement between these stages. Given each stage will inevitably engage progressively greater level of resourcing from both the regulator and the NSPs it is important that the

'gateways' or conditions are as clearly specified as possible. For example, and as noted above in section 6, the AER must provide greater clarity as to how it will determine whether or not an overspend is "minor".

The NSP should be in no doubt at any point in the ex post review precisely what Stage is being conducted by the AER, and the AER should set out its process as to how it will actively engage with the NSP through the review.

Question 25

Are the issues that the AER proposes to consider as part of the ex post review appropriate?

ENA proposes to answer this question be reference to the individual Stages 1-4 outlined in *Figure 5.1* and as expanded on in the Issues Paper.

Step 1 – Actual performance

The AER's inquiry at this stage should reflect the fundamental question to be asked in any *ex post* assessment of actual performance, i.e. are there significant changes in costs, demand or other factors not considered in the previous capital expenditure forecasts that explain the level and pattern of expenditure undertaken?

Given the range of *ex ante* and normal commercial incentives that apply to constrain expenditure, this first stage should recognise that the most likely reason for capex overspend is the inherent uncertainty of cost forecasts dependent on a range of difficult to predict external factors. In determining expenditure allowances, the regulator needs to account for the level of uncertainty associated with cost forecasts, particularly for major infrastructure costs.

A significant driver of capex is non-discretionary investment to meet mandatory service requirements enshrined in regulations or licence conditions. The Issues Paper discusses the issue of deferrals without recognising that, in some instances, there may be limited capacity to defer essential projects or connection related costs.

If a network's record in terms of over-expenditure related to a previous jurisdictional regulatory framework, then this would not be relevant to an assessment of performance under the current regulatory framework.

Another factor which should be examined at this stage is whether there were changes in the nature of regulatory obligations affecting the planning and carrying out of capex projects.

Step 2 - Incentives

The guideline should provide clearer guidance about key terms applied in the AER's assessments. In a number of places there is scope to more tightly define terms used. For example, it would be helpful for the AER to specify the types of issues that would be considered '*minor concerns*' as they relate to service standards or overspending.

Guidance is sought as to how the AER would plan to make an assessment of whether a network is '*responsive*' to a CESS. It may be difficult for the AER to assess this externally to the

network itself. In particular, guidance is sought about the types of criteria that would be used by the AER to determine whether a firm was '*responsive*'.

The ENA doubts that *ex post* assessments of the 'responsiveness' of networks based on expenditure profiles will be tractable for a regulator. The outturn expenditure profile of a network will be the result of a range of forecast and un-forecast demand and cost factors, commercial and management decisions made over a five year regulatory period. Identifying whether or not the firm has been responsive to a CESS in an *ex post* sense is likely to be problematic.

This highlights the need for careful design of *ex ante* capex incentives to ensure that they can be relied upon to drive efficient investment decisions. If the AER is unable to make transparent and predictable assessments on a criterion such as 'responsiveness' that affect the operation of the review process, it will mute incentives and create increased regulatory risks because it will make the actual operation of the proposed *ex post* review scheme uncertain, rather than promoting greater efficiency in capital expenditure delivery.

Step 3 – Project management

It is unclear what function the repetition in Stage 3 of *Are the overspending concerns minor*? and *Are the service standard concerns minor*? questions serves, given that they also represent thresholds in Stage 2.

The combined effect of their inclusion and the interaction of Stages 2-3 in Figure 5.1 is that if for any reason a network is not subject to a CESS in the future, and more than minor service standard or overspending concerns are identified, then the AER is bound to conduct a detailed review of NSP projects.[14] The ENA queries if this is the intended or efficient operation of such a review process. It would appear, for example, to not give the AER the flexibility to be satisfied by other evidence put forward by the network in Stage 3 that its project management and assessment techniques were best-practice.

Step 4 – Detailed review of capex

Ex post reviews of capex are highly complex, contentious, and problematic regulatory instruments. They differ fundamentally in kind from an *ex ante* framework.

At the heart of this complexity and contentiousness is the issue of the information to be taken into account when conducting the *ex post* review, and the risks and costs of applying hindsight or knowledge or insights only available in retrospect to expenditure undertaken in an environment of incomplete information.

There is a lack of clarity in the Issues Paper over the degree to which Stage 4 of the process – the detailed review of capital expenditure – will take into account the NER requirement (S6.2.2A (h)(2)) that the AER must only take into account information and analysis that a network could have been reasonably expected to have considered or undertaken at the time that it undertook the relevant expenditure (referred following as the '*no hindsight'* rule).

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[14] The Issues Paper on p.42 appears to suggest a discretionary choice as to whether the review would proceed to the next step, whereas Figure 5.1 suggests progression would be automatic.

The Issues Paper refers to undertaking *ex post* analysis '*using a similar methodology to how it undertakes this analysis ex ante*' – but the processes of ex ante assessment and *ex post* review have fundamentally different starting points: one is an assessment of a forecast against a series of potential scenarios, the other is a backwards looking, detailed assessment of expenditure under a particular set of circumstances.

A guideline which does not set out a framework of how the AER would interpret and apply the 'no hindsight rule' would not provide sufficient information for networks to be able to evidence the prudence and efficiency of investments, and unnecessarily increase regulatory risk.

Step 4 should be clarified to ensure that it is conducted subject to the *no hindsight rule*. This would need to be taken into account at the stage of AER analysis and reflected in external advisory work from engineering firms reviewing a sample of projects, for example.

Question 26

Are there any other factors that the AER should consider in conducting an ex post review?

As above, throughout the review the AER should be considering whether there are significant changes in:

- costs;
- demand levels; and
- regulatory obligations impacting on capital project planning or delivery

Stages 1-4 should be informed by the "'no hindsight rule" in clauses S6.2.2A(h) and S6A.2.2A of the NER.

Further, the AER should have regard to whether the investment satisfied the regulatory investment test, and jurisdiction-specific factors such as DNSP reliability improvement capex in Victoria.

Question 27

Are there any additional factors that we should consider before excluding an amount of an over-spend from a NSP's RAB?

The ENA considers that in applying S6.2.2A the AER should also take into account:

- the revenue and pricing principles, and in particular the requirement for a NSP to be provided with a reasonable opportunity to recover *at least* efficient costs;
- the *Capital Expenditure Criteria (S.6.5.7 (c))* refers to '*a realistic expectation of the demand forecasts and cost inputs required to achieve the capital expenditure objectives*'. This criterion recognises that there is a level of uncertainty associated with forecasting expenditure requirements. In undertaking a detailed ex post review,

consideration should be given to the level of uncertainty assumed at the time of the setting of the expenditure allowances;

- the materiality thresholds applied to cost pass through applications; and
- the degree to which either the rate of return determined for the network or operating cash flows incorporate sufficient compensation for the risk of asset stranding which is being created by the potential exclusion of expenditure from the RAB.

In previous AER rate of return determination processes the AER has identified the fact that capital expenditure is automatically included in the RAB as a factor which lowered the risk profile of the benchmark firm. With this change in approach this factor needs to be considered in the AER's rate of return guideline and determinations or, if not, prior to a decision to exclude capital expenditure from being rolled into the regulatory asset base.[15]

Question 28

Do you think our approach for the assessment of related party margins is reasonable? What other approaches may be appropriate?

The ENA has no comment on this question, as it relates to the specific commercial arrangements through which individual networks seek to deliver services efficiently. ENA members affected by this matter will respond in individual submissions on this question.

Question 29

Do you think our approach for the assessment of capitalisation requirements is reasonable? What other approach may be appropriate?

The ENA considers that AER's proposed approach as outlined in the Issues Paper appears broadly reasonable.

[15] AER Final Decision – Review of WACC Parameters, May 2009, pp.249-250.