

Our Ref: D12/5494  
Contact Officer: Scott Sandles  
Contact Phone: 03 9290 1487

2 February 2012

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
Level 5  
201 Elizabeth Street  
SYDNEY NSW 2000

**By electronic mail**

Dear Mr Pierce

**Response to AEMC queries on AER network regulation rule change proposals**

On 22 December 2011, Mr Richard Khoe of your organisation sent an email to Mr Chris Pattas of the AER setting out six queries in relation to the AER's network regulation rule change proposals.

Please find attached to this letter information (inc. Excel spreadsheets) in response to these queries. This material does not contain any confidential information and so I have no hesitation with the AEMC publishing this material should it wish to do so.

If you have further queries on these or any other aspects of the rule change proposals I would be pleased to provide further information.

Yours sincerely



Andrew Reeves  
Chairman

## Response to AEMC queries on AER network regulation rule change proposals

*Q1. Could you provide more details on where the 60/40 split came from? How did you calculate it? Could you provide your models?*

Any incentive regime based on a sharing mechanism needs to select a ratio for splitting costs between consumers and shareholders. The level of the ratio is a matter for judgement taking into account relevant considerations.

To ensure that the choice of ratio was robust and defensible, the AER selected a ratio based on outcomes similar to that associated with a 5 year capex rolling incentive. The spreadsheet used by the AER to model the outcomes of a capex rolling incentive is provided as **Attachment 1**.

As set out in the Rule change proposal,<sup>1</sup> the AER's proposed sharing ratio reflects the outcomes associated with a capex rolling incentive assuming a weighted average asset life of 40 years, a regulated WACC of 11 per cent and a true WACC of 11 per cent. The model provides a figure of 40.71% which was rounded down to 40 per cent.<sup>2</sup>

To check the reasonableness of this ratio, regard could be had to the level of exposure to capex overspends considered appropriate in other jurisdictions. The 40:60 ratio is comparable the level of exposure adopted by Ofgem.<sup>3</sup>

The AER recognises that its rule change proposal is prescriptive in this area. In forming the rule change proposal, it was not the intention of the AER to reduce the general level of prescription as an end in itself. Rather, the rule change package adopts prescriptive elements and more flexible elements as appropriate for the various parts of the regulatory regime.

In developing chapter 6A, the AEMC codified in the rules a prescriptive capex incentive framework. For TNSPs the NER prescribed the opening value of the regulatory asset base (RAB) for the first regulatory period under the NER. From that value, the NER requires that the RAB must be:

- rolled-forward (instead of periodically optimised)

---

<sup>1</sup> AER, *Rule change proposal—Economic regulation of transmission and distribution network service providers*, September 2011, p.42.

<sup>2</sup> It is also important to note that this sharing ratio should be considered notional, as the ultimate sharing of capex overspends between shareholders and consumers also depends on other factors such as whether actual or forecast depreciation is adopted to roll forward the regulatory asset base (RAB).

<sup>3</sup> Ofgem has in the past adopted an incentive range of 50-60% for gas distribution, and 40-50% for transmission – i.e gas distribution shareholders would bear 50-60% of the cost of an overspend or keep 50-60% of the benefits associated with an underspend. Under the AER's model, the 40% sharing factor is a minimum rate since NSPs would also bear financing costs and (potentially) depreciation during the time that elapses between the overspend and the next regulatory reset. See Ofgem, *Decision on strategy for the next transmission and gas distribution price controls - RIIO-T1 and GD1 Business plans, innovation and efficiency incentives*, March 2011, pg 40.

- based on actual capex (instead of based on forecast capex or based on actual capex adjusted due to a sharing ratio, ex post prudency review, etc) and
- based on actual depreciation (instead of forecast depreciation).

Further, the NER does not permit any other adjustment to revenues (such as through an efficiency benefit sharing scheme (EBSS)) associated with the efficiency of a TNSP's actual capex.<sup>4</sup> A TNSP's expectations on how its capex forecast will be set also impacts on capex incentives. The discretion afforded to the AER to assess and amend capex forecasts as proposed by TNSPs is constrained by the NER.

The AER proposed to retain investment certainty in the treatment of the RAB through prescribing its proposed capex framework in the NER, given AEMC's concerns during the development of chapter 6A of providing certainty and predictability of key elements of the decision making methodology through codification in the NER.<sup>5</sup>

However, the AER recognises that alternative models could be implemented that include more flexibility for how the roll-forward mechanism is used to influence the capex incentive framework. For example, the joint consultant report commissioned by the Energy Networks Association (ENA) argues that it is inappropriate for the NER to prescribe approaches where refinement may be required over time, where important matters of technical detail need to be considered, and where the scheme should be permitted to vary across NSPs.<sup>6</sup> The AER considers there is merit in these arguments.

Providing investment certainty and effective ex ante capex incentives requires a NSP to understand what the financial outcomes of its actions are going to before it invests in new assets. The instrument through which this certainty is provided—rules or guideline / scheme—is of less importance. Accordingly, the design of ex ante capex incentives through an AER guideline / scheme would provide both investment certainty and address the above matters raised in the joint report.

The joint report further states that while the AER's proposed capex arrangements involve adjustments to the RAB, it would be possible to design equivalent arrangements through a capex incentive scheme that results in revenue increments or decrements included as a separate building block.<sup>7</sup> The AER agrees these are substitute mechanisms, in principle.

However, under the current chapter 6 rules (or the ENA's suggested changes to chapters 6 and 6A) with respect to a capex EBSS, outcomes equivalent to the AER's

---

<sup>4</sup> The capex incentive arrangements applying to DNSPs are somewhat less prescribed in the NER as a result of two changes made by the Ministerial Council on Energy (MCE) when transposing the transmission rules into the distribution rules: (1) it permitted the AER to decide between the use of actual or forecast depreciation; (2) it permitted the AER to develop a capex EBSS subject to certain criteria set out in the NER.

<sup>5</sup> AEMC, *Rule determination—National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 No. 18*, 16 November 2006, pp.33-34.

<sup>6</sup> Energy Networks Association, *Response to AEMC consultation papers—economic regulation of network service providers*, 8 December 2011, p.32.

<sup>7</sup> PWC, Gilbert+Tobin, NERA, *Design of capital incentive arrangements—A joint report for the ENA*, 8 December 2011, pp.5, 36.

proposed sharing ratio are not possible. The restrictions these rules impose on the design of a capex EBSS would not permit a capex EBSS to be designed that results in incentive arrangements equivalent to the AER's proposed sharing ratio adjustment to the RAB.

The AER's capex incentive rule change deliberately proposed capex incentives that were asymmetric—that is, increases in actual capex relative to the forecast would be treated differently to decreases in actual capex. The current chapter 6 rules and the ENA's suggested rule changes would only permit symmetric capex incentive schemes. Accordingly, if the AEMC were minded to accept the ENA's recommendation to provide the AER with the discretion to develop capex incentives through a capex EBSS it is important that both chapters 6 and 6A at least permit the *option* of an asymmetric scheme. The reasons for this are addressed further in response to the next question.

*Q2. Capex incentives—Can you provide some details as to why no EBSS has ever been used for capex in distribution?*

The AER's decision not to include capex within its EBSS was principally formed on the basis that inclusion of capex could inappropriately incentivise the deferral of capex into future regulatory periods.<sup>8</sup>

During the development of the first version of the EBSS in 2007-08, the AER considered and decided against including capex in the EBSS.

On this issue, stakeholders, including NSPs, had mixed views. A range of NSPs<sup>9</sup> supported the inclusion of capex in the EBSS or the option for individual DNSPs to have an EBSS apply to their capex. Other NSPs<sup>10</sup> did not support the inclusion of capex.

In reaching its decision to exclude capex, the AER considered the impact of a capex EBSS on the potential for windfall gains / losses to NSPs or consumers, incentives to inappropriately defer capex, demand management incentives, and the interaction with opex incentives.<sup>11</sup>

As part of these considerations, the AER considered the Essential Services Commission of Victoria's (ESCV's) experience of applying a capex efficiency carryover mechanism (ECM) in Victoria. The ESCV's decision to discontinue its capex ECM was partly due to the uncertainty as to whether variances from forecast

---

<sup>8</sup> AER, *Electricity distribution network service providers—Efficiency benefit sharing scheme*, June 2008, pp.10-11. The problem of a capex EBSS “over-counting” the benefit from project deferrals (unless appropriate adjustments to the scheme can be made) has been recognised in the joint consultant report commissioned by the ENA. PwC, Gilbert + Tobin, NERA, *Design of capital expenditure incentive arrangements—A joint report for the ENA*, 8 December 2011, p.29.

<sup>9</sup> ENA, Alinta, CitiPower and Powercor, Envestra, ETSA Utilities and United Energy.

<sup>10</sup> Energex and Ergon Energy.

<sup>11</sup> The AER's detailed considerations on this matter are set out in: AER, *Issues paper—Guidelines, models and schemes for electricity distribution network service providers*, November 2007; AER, *Explanatory statement—Proposed electricity distribution network service providers efficiency benefit sharing scheme*, April 2008; AER, *Electricity distribution network service providers—Efficiency benefit sharing scheme*, June 2008.

capex are the result of lasting efficiencies or the temporary deferral of expenditure. The ESCV's decision was made in the context of significant underspending during the 2001-05 regulatory period by the Victorian DNSPs followed by an increase in capex forecasts submitted by those DNSPs for the 2006-10 regulatory period.

The AER shared the ESCV's view that capex deferrals under a benefit-sharing scheme could skew the potential benefits of the scheme in favour of DNSPs, given the prospect that customers may partly fund deferrals up to three times, that is:

- through financing the expenditure forecasts
- through financing rewards under the benefit-sharing scheme, and
- where the same (deferred) capital projects are proposed in the next reset.

To assess the significance of the above matters the AER modelled the incentives on DNSPs to defer capex, both within and between periods, and with and without an EBSS applied to capex.

The results of that modelling demonstrated that if deferred capex is included in the forecasts for the next period, a DNSP, in the absence of a capex EBSS, retains up to 100 per cent of the time value of money benefits of deferring capex. Specifically, a DNSP would retain 100 per cent of the benefit from deferring capex included in year 1 of the capex forecast—benefits from deferring capex included in years 2-5 of the forecasts would be shared between the DNSP and consumers. However, if a capex EBSS is applied, the benefit to the DNSP of deferring capex to the following regulatory period is much greater and can even exceed the total time value of money benefits of deferring capex—that is, where the benefit to the DNSP exceeds 100 per cent, the benefit to consumers of the deferral is negative.

Full details of the methodology and results of this modelling can be found in Appendix C to the AER's final decision on the distribution EBSS.<sup>12</sup>

Since the AER formed the above opinion, regulatory control periods for most electricity NSPs have been completed. The outcomes from the last round of regulatory control periods for electricity NSPs is that, some NSPs underspent or spent close to their capex allowances whereas other NSPs overspent their allowances. Most of the significant overspending by the NSW and QLD DNSPs occurred towards the end of the regulatory period. This was after the AER formed the above concern about further incentivising capex deferrals through the application of a capex EBSS. Up to 25 per cent of the increases in distribution network charges arising in NSW and Queensland in the current determinations were attributable to these capex overspends.<sup>13</sup> These outcomes have highlighted the need to review and ensure that the regulatory regime does not provide NSPs with an incentive to over-capitalise their networks. A key benefit of the AER's sharing mechanism is that it would only apply

---

<sup>12</sup> AER, *Electricity distribution network service providers—Efficiency benefit sharing scheme*, June 2008, pp.36-43.

<sup>13</sup> AER, *Rule change proposal—Economic regulation of transmission and distribution network service providers*, September 2011, p.38.

to networks that overspend the forecast capex. Networks that traditionally invest within the forecast would be unaffected by this mechanism. At the same time, under the AER's proposals the capex forecast is not a fixed target that ignores changed circumstances. The capex forecast would effectively be amended for any situation that gave rise to a pass through event, contingent project or capex re-opener. Collectively, these intra-period adjustments cover a wide range of scenarios.

The ENA's joint consultant report argues that the AER has overstated the potential for NSPs to have an incentive to increase their actual capex towards the end of the regulatory period.<sup>14</sup> The joint report states this incentive will depend not on the current regulatory WACC but on the NSP's expectations of the regulatory WACC for the next regulatory period and subsequent regulatory periods. The AER agrees that it is the expected regulatory WACC in future regulatory periods which is of relevance. However, the implied position in the joint report is that NSPs would have no reason to expect that the regulatory WACC would be greater than their true required return in these future periods, and therefore the AER's concerns are overstated.

The current regulatory regime presumes that the regulatory WACC will approximate the true WACC of NSPs. However, the current financial arrangements pertaining to government-owned NSPs institutionalise circumstances where this is not the case.

For government-owned NSPs, the company tax allowances included in regulated revenues are effectively another source of return on equity due to the company tax equivalence payments government-owned NSPs make to their owners. Accordingly, government-owned NSPs especially would have a reasonable expectation that in future regulatory periods the combined return from the regulatory WACC and tax equivalent payments would exceed their required return—leading to lower incentives for efficient capital expenditure and an incentive to over-capitalise.

The Energy Users Rule Change Committee's (EURCC's) solution to this incentive problem is to provide a lower WACC to government-owned NSPs relative to privately-owned NSPs. The AER's proposal to provide higher penalties on capex overspends could be viewed as an alternative solution to this problem.

An asymmetric capex incentive mechanism, such as the AER's sharing ratio, guards against the incentive some NSPs may have to significantly underspend their capex forecasts through the temporary deferral of capex into the next period which, in some circumstances, is not in the long term interests of consumers. These temporary deferrals have the potential to lead to higher prices and possibly lower service performance to consumers. An asymmetric mechanism also guards against the incentive some other NSPs may have to significantly and inefficiently overspend their capex forecasts to receive the higher return.

Additionally, an asymmetric mechanism may better balance capex incentives with service performance incentives. That is, an asymmetric mechanism would be unlikely to incentivise NSPs to continually reduce or defer capital projects to the level that it significantly deteriorated service performance.

---

<sup>14</sup> PWC, Gilbert+Tobin, NERA, *Design of capital incentive arrangements—A joint report for the ENA*, 8 December 2011, pp.8-9.

For these reasons, if the AEMC were minded to accept the ENA's recommendation to provide the AER with discretion to develop capex incentives through a capex EBSS (rather than accepting the AER's sharing ratio adjustment to the RAB), the AER considers it is important that both chapters 6 and 6A permit the option of asymmetric incentive arrangements applying under such a scheme.

*Q3. Prohibition on late submissions—Have you considered legally the possible inconsistency between your proposed clause 6.14.1(a) and s28ZC of the NEL?*

Yes. We do not consider there is an inconsistency legally between our proposed clause 6.14.1(a) and section 28ZC of the NEL. The proposed clause 6.14.1(a) is expressed to be “subject to the Law” and is to be read together with section 28ZC of the NEL.

Under our proposed rules, section 28ZC continues to provide the AER with the discretion to consider a submission received after the period specified in its notice expires. Our proposed clause 6.14.1(a) does not fetter that discretion. Instead, it prevents the AER from considering a submission that does not comply with our proposed rules regarding the content of a submission, which prohibits a NSP from including in a submission content that should have formed part of a regulatory or revised regulatory proposal or content in response to the AER's draft decision.

Please also see paragraph 36 of the Australian Government Solicitor advice dated 27 September 2011 provided as an appendix to the AER's rule change proposals.

*Q4. Confidential submissions—Why has the AER not made more use of its NEL powers to deal with confidential information, such as s28ZB?*

Please note that the objective of our proposed rules regarding submissions over which confidentiality is claimed does not concern the process of disclosing information claimed as confidential but instead tightens the confidentiality provisions in the NEL to discourage NSPs from making blanket and unsubstantiated confidentiality claims.

The process prescribed in section 28ZB of the NEL, particularly where a NSP makes a blanket confidentiality claim, is challenging and sometimes infeasible to apply given the tight and finite timeframes mandated by the NEL in making determinations. The AER is, however, currently considering improvements to its internal processes to make the application of the process in section 28ZB more administratively feasible. The AER recently applied section 28ZB to deal with confidential information in relation to fire-starts data associated with the Victorian “F-factor” scheme.

*Q5. Related party margins—If the capex incentives in general were stronger, could that eliminate the need for the rule change regarding related party margins?*

No. The rule change regarding related party margins<sup>15</sup> is required, even if the capex incentives in general were stronger. There will still be circumstances where a NSP has an incentive to inefficiently incur related party margins where these inefficient

---

<sup>15</sup> Related party margins are the margins paid to a contractor (where there is a common ownership connection with the NSP) which exceed the contractor's directly incurred costs in providing services to the NSP.

margins are only partly recoverable under the regulatory regime (i.e. under a higher-powered capex incentive framework).

The only way to remove this incentive is to disallow in full the recovery of those inefficient margins. Related party margins are a “special case” among capex incentive issues because the financial position of the NSP’s shareholders (and therefore the NSP’s incentives) depend not just on the actions of the NSP but also on the actions of the related party.

From the perspective of the NSP’s and related party’s parent company, no real financial cost is borne by the shareholders of the NSP in relation to the type of related party margin that the AER’s rule change proposal addresses—costs incurred by the NSP are offset by the revenue earned by the related party contractor.

Even if only some of the inefficient margin is recoverable from consumers (i.e. an NSP overspends and the sharing ratio is applied), the NSP still has an incentive to pay the margin to its related party. This is because while the NSP incurs a net loss (portion of margin recoverable through regulated revenues minus whole contract margin incurred) from this transaction the related party makes a larger net gain (whole contract margin received minus no costs), leading to an overall net gain to the NSP’s and related party’s common shareholders.

**Attachment 2** provides a worked example of this contractual situation under three scenarios, as detailed in the table below.<sup>16</sup>

Under each scenario the financial position of the related party is the same. That is, the related party receives the margin from the NSP and so the related party’s financial position is not impacted by whether the regulatory regime permits the NSP to recover this margin.

Applying the sharing ratio means that the financial penalty to the NSP is greater than under the current rules. However, the financial benefit to the related party is still greater than this penalty—leading to the net present value (NPV) positive outcome to the NSP’s shareholders if the NSP incurs this inefficient margin.<sup>17</sup>

Scenario 3 produces a zero net payoff to the shareholders of the NSP, which clearly indicates that only by completely removing the recovery under the regulatory regime of this margin can the incentive for the NSP to incur this inefficient margin be removed.

---

<sup>16</sup> Key assumptions include, for simplicity: an opening RAB of 0, a forecast capex allowance of \$40m for year 1 and no capex incurred by the NSP for other years, the NSP’s contract price for capital work with its related party is \$50m while actual cost incurred by the related party is \$40m for year 1, an asset life of 10 years, no half WACC adjustment for capex for simplicity, depreciation included in the capex incentive.

<sup>17</sup> The AER is also concerned about the recovery of related party margins (that would not pass its assessment approach) where a NSP underspends its capex allowance. In this circumstance, the benefit to the shareholder would be even greater.

**Financial position of NSP’s shareholders based on different regulatory treatment of an inefficient \$10m related party margin paid in year 1 of the regulatory period (Net present value, millions)**

| Scenarios  | Net payoff to NSP | Net payoff to related party | Net payoff to shareholders* |
|--|-------------------|-----------------------------|-----------------------------|
| <b>Scenario 1: Current rules.</b><br>Margin excluded from forecast, but rolled into RAB at the end of the period   | -\$6.7m           | \$9.3m                      | \$2.6m                      |
| <b>Scenario 2: Sharing ratio only</b><br>Margin is excluded from forecast, but rolled into RAB at the end of the period applying the 60:40 sharing ratio.  | -\$7.8m           | \$9.3m                      | \$1.6m                      |
| <b>Scenario 3: Sharing ratio and RAB adjustment</b><br>Margin is excluded from the forecast, and also not rolled into the RAB and the end of the period (60:40 sharing ratio applied to remainder of capex overspend). | -\$9.3m           | \$9.3m                      | \$0m                        |

Source: AER analysis (spreadsheet attached)

\*Assumes NSP and related party are wholly owned by the same shareholders

It is important to note that the AER’s rule change proposal does not exclude related party margins from the RAB, per se. Rather the rule change proposal is to either include or exclude related party margins from the RAB consistent with how those margins were treated in the capex forecast at the start of the regulatory period. The AER accepts that related party margins are efficient for a number of purposes. These include to recover the costs of the related party’s corporate overheads and to recover the cost of and provide a return on assets used by the related party in servicing the NSP. Further, where a related party has only a minority ownership stake in a NSP the AER’s approach is to presume any margins paid are efficient and accept those margins in the capex forecast (except for in limited circumstances).<sup>18</sup>

---

<sup>18</sup> For a discussion of the AER’s position on related party margins, see AER, *Final decision—Victorian electricity network service providers—Distribution determination 2011-2015*, October 2010, pp.149-303.

Accordingly, where the AER has accepted related party margins in the capex forecast for those reasons then those margins would also be rolled into the RAB at the end of the regulatory period (subject to the application of the sharing ratio or alternative mechanism set out in an AER guideline / scheme).

*Q6. Reasonable range—At page 29 of the rule change request the AER refers to a proposal being submitted “outside of the top of the range that the AER is satisfied” would reasonably reflect the required expenditure. In practice, does the AER always identify a reasonable range (that is, a maximum possible number and a minimum possible number) when it assesses each capex / opex proposal?*

No. It is not the AER’s general practice to identify a maximum possible number and a minimum possible number when assessing a capex or opex proposal.

The AER recognises that there are a range of possible forecasts that “reasonably reflect” the capex or opex criteria. Whether a NSP’s proposal falls outside the range of possible forecasts is a matter of regulatory judgment for the AER, in satisfying itself whether the forecast reasonably reflects the capex or opex criteria having regard to the capex or opex factors. In the event the AER is not satisfied, the substitute forecast it must determine is also similarly a matter of judgment. The many considerations that must be balanced in assessing a NSP’s proposal does not lend itself to precisely identifying a maximum or minimum possible number. This is not an exact science, nor can it be.