AEMC

RULE CHANGE

Australian Energy Market Commission

RULE DETERMINATION

National Gas Amendment (Setting the Opening Capital Base) Rule 2014

Rule Proponent

Australian Energy Regulator

2 October 2014

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About the AEMC

The AEMC reports to the Council of Australian Governments (COAG) through the COAG Energy Council. We have two functions. We make and amend the national electricity, gas and energy retail rules and conduct independent reviews for the COAG Energy Council.

Summary

The Australian Energy Market Commission has made a final rule to amend how the economic regulator calculates the value of a regulated gas pipeline. Prior to the start of a new access arrangement period, the value of the opening capital base for the regulated pipeline must be set. The final rule requires this calculation to include the removal of any benefit or penalty arising out of the difference between estimated and actual capital expenditure in the final year of a prior access arrangement period.

The final rule is expected to prevent service providers from experiencing benefits or losses arising out of a difference between estimated and actual capital expenditure used to set the opening capital base. This in turn should result in reference tariffs for the regulated pipeline reflecting efficient actual capital expenditure.

The final rule is made in response to the Australian Energy Regulator's (AER) rule change request concerning the methodology used to set the opening capital base in respect of certain gas pipelines and access arrangements. Part of the economic regulation of certain pipelines includes the assessment and approval of access arrangements.

The final rule reflects the AER's proposed rule, subject to a minor typographical correction, and applies to pipelines regulated by the AER and, in Western Australia, the Economic Regulation Authority.

Reasons for the Commission's decision

The Commission considers that the final rule is likely to contribute to the achievement of the national gas objective (NGO) by preserving the incentive framework of the regulatory regime that rewards service providers when they spend less capital expenditure than forecast.

Under the final rule, reference tariffs are more likely to reflect efficient utilisation of, and investment in, pipeline services because they would be less likely to be influenced by gains or losses unrelated to the efficiency of the service provider. This outcome accords with and contributes to the achievement of the NGO.

Conversely, maintaining the current provisions could encourage an unintended incentive for service providers to pursue inefficient revenue maximisation. This would not be in the long term interests of consumers.

The Commission has also considered the role that regulatory certainty and transparency in the methodologies used by the economic regulators play in contributing to a stable investment environment and the promotion of the NGO.

The final rule will commence on 2 October 2014.

Contents

1 AER's rule change request

1.1 The rule change request

On 11 November 2013, the Australian Energy Regulator (AER) made a request to the Australian Energy Market Commission (AEMC) to make a rule regarding the methodology and requirements of setting the opening capital base in certain access arrangements for natural gas pipelines (the rule change request).

More specifically, this rule change request concerned the methods utilised by the AER and the Economic Regulation Authority (ERA) under rule 77(2)(a) of the National Gas Rules (NGR) to set the opening capital base in respect of certain access arrangements.[1]

The rule change request proposed to modify the NGR to require the economic regulator to adjust the opening capital base to remove any benefit or penalty arising out of any difference between estimated and actual capital expenditure in the final year of an earlier access arrangement period.

Appendix B provides more detail about the relevant regulatory background, including the requirements to set an opening capital base.

1.2 Rationale for the rule change request

The AER submitted that the proposed change is required to prevent pipeline service providers from experiencing benefits or losses due to a difference between the estimated and actual final year capital expenditure used to set the pipeline’s opening capital base.

Gains or losses not related to the efficiency of service providers, the AER submitted in its rule change request, conflict with the NGO because they can adversely affect pipeline investment and usage incentives and lead to price distortions.

The AER argued that without the ability to make an adjustment to remove any benefit or penalty associated with the difference between estimated and actual capital expenditure of a preceding access arrangement period, in cases where the actual capital expenditure is less than the estimated capital expenditure, service providers will retain a benefit of additional revenue that will be funded by increased reference tariffs during the course of the relevant access arrangement period.[2]

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1 The rule change request only impacts on those pipelines that are subject to full economic regulation under Part 9 of the NGR. Such regulation requires a "full access arrangement", as approved by the relevant regulator, to be in place for that pipeline.

2 AER rule change request, 11 November 2013, p9.

1.3 Solution proposed in the rule change request

The AER has proposed to resolve the issue discussed above by amending rule 77(2)(a) to require the economic regulator to remove any benefit or penalty associated with the difference between estimated and actual capital expenditure included in the opening capital base of a relevant access arrangement.

To do this, the AER has proposed the following text be added to the end of rule 77(2)(a):

> "This adjustment must also remove any benefit or penalty associated with any difference between the estimate and actual capital expenditure;"

The above quote appears inadvertently to omit the letter "d" in the word "estimate". Based on statements in the rule change request, and the proponent's intention to mirror the equivalent provision of the National Electricity Rules (NER), the Commission considers the text below accurately reflects the intention of the proposed rule:

> "This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure;"

1.4 Current arrangements

Setting the opening capital base

Under the NGR, the total revenue for each year of an access arrangement period is derived using the building block approach, which includes the projected capital base.[3] The opening capital base makes up part of the projected capital base.

The NGR provides a methodology the economic regulator must use to set the opening capital base for a subsequent access arrangement period where an access arrangement period follows immediately on the conclusion of a preceding access arrangement period.[4]

Relevantly, rule 77(2) provides:

> "If an access arrangement period follows immediately on the conclusion of a preceding access arrangement period, the opening capital base for the later access arrangement period is to be: (a) The opening capital base as at the commencement of the earlier access arrangement period (adjusted for

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3 The building block approach combines: a return on the projected capital base for the year; depreciation on the projected capital base for the year; the estimated cost of corporate income tax for the year; increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency; and a forecast of operating expenditure for the year.

4 The NGR also provide other methods to calculate the opening capital base, for example, when a pipeline first becomes a covered pipeline or if a period intervenes between access arrangement periods during which the pipeline is not subject to a full access arrangement. However, this rule change request does not affect these methods.

any difference between estimated and actual capital expenditure included in that opening capital base)."

It is this part of setting the opening capital base that forms the subject of the rule change request. A more detailed examination of the methodology the economic regulator currently must use when setting the opening capital base is considered at Appendix B.

1.5 Background

This rule change request arises out of a recent decision of the Australian Competition Tribunal (Tribunal), the APA GasNet decision.[5] In this decision, the Tribunal held that the wording of rule 77(2)(a) does not empower the AER to adjust the opening capital base with respect to the revenue associated with the return on capital arising out of the difference between estimated and actual capital expenditure in the final year of a relevant access arrangement period.[6]

In its rule change request, the AER expressed concern that the current arrangements for setting the opening capital base, following the APA GasNet decision, may provide a financial incentive for service providers to over-estimate total final year capital expenditure and to defer efficient expenditure.[7] The proposed rule, the AER asserted, will prevent service provider incentives from being skewed towards overestimating or underspending in the final year of an access arrangement period. Rather, service providers would be focused equally, across the access arrangement period, on the efficiency incentive of spending less than forecast capital expenditure. This, the AER submitted, will promote the long-term interests of consumers of natural gas, particularly with respect to price.

In 2011, the Tribunal also considered the ability of the AER to make an adjustment to the return on capital component of the opening capital base to account for any difference between estimated and actual capital expenditure under rule 77(2)(a).[8] In this decision, the Jemena decision, the Tribunal held that the policymakers who drafted the NGR intended for there to be consistency between electricity and gas regulation and did not intend that gas pipelines should be allowed to keep the return on capital associated with an over-estimation while electricity networks would not.[9]

1.6 Commencement of final rule

The final rule will commence on publication of the final rule determination on 2 October 2014.

5 Application by APA GasNet (Operations) Pty Ltd (No 2) [2013] A CompT8 (APA GasNet decision).

6 ibid, [142].

7 AER rule change request, 11 November 2013, p5.

8 Application by Jemena Gas Networks (NSW) Ltd (No 3) [2011] A CompT6 (Jemena decision).

9 ibid, [54-55].

2 Final rule determination

2.1 Commission's final rule determination

In accordance with s. 311 of the NGL, the Commission has made this final rule determination in relation to the rule proposed by the AER. The Commission has decided to make this final rule, subject to a minor typographical correction, in the form of the proposed rule.

The Commission's reasons for making this final rule determination and final rule are:

- the final rule preserves the incentive framework of the regulatory regime;
- the final rule will safeguard against gains or losses not related to the efficiency of service providers from impacting on pipeline investment and usage incentives; and
- under the final rule, reference tariffs will be more likely to reflect efficient utilisation of, and investment in, natural gas services and will be less likely to be distorted by gains or losses unrelated to the efficiency of service providers.

The Commission notes that the final rule will also reduce the uncertainty under the existing arrangements about the methodology an economic regulator must use when setting the opening capital base. Considering the effects of the proposed rule against the current arrangements is an essential step in the rule change process.

The *National Gas Amendment (Setting the Opening Capital Base) Rule 2014 No. 5* is published with this final rule determination. The rule as made commences operation on 2 October 2014.

Appendix A sets out in more detail the relevant legal requirements under the NGL for the AEMC to take into account in making this final rule determination.

2.2 Rule making test

The Commission may only make a rule if it is satisfied that the rule will, or is likely to, contribute to the achievement of the NGO.[10]

The NGO is set out at s. 23 of the NGL and states:

> "The objective of this Law is to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."

10 See s. 291(1) of the NGL.

The Commission considers that the relevant aspects of the NGO in the context of this rule change request are:

- the efficient use of natural gas services; and
- the efficient investment in natural gas services.

The efficient use of, and investment in, natural gas services promotes the long term interests of consumers by establishing a regulatory framework in which consumers do not pay for the inefficient use of, or investment in, natural gas services and by requiring tariffs to be based on the efficient costs of an efficient and prudent service provider.

Efficient use of, and investment in, natural gas services

The Commission considers the final rule will remove the potential for service providers to experience gains or losses associated with the difference between estimated and actual capital expenditure. The final rule will also work to preserve the operation of the incentive framework of the regulatory regime. Under the current rules, following the decision in APA GasNet, service providers may be exposed to unallocated risks and gas customers may be exposed to tariff pricing that does not reflect efficient costs.

Regulatory certainty and transparency

As noted above, the final rule should also contribute to greater regulatory certainty. If the rule was not amended, the present uncertainty arising from the differing outcomes of the recent Tribunal decisions regarding whether the AER has the power to make the relevant adjustment would be likely to persist.

The Commission considers the final rule may provide service providers, and gas users generally, with greater regulatory certainty and transparency about the scope and application of rule 77(2)(a). This increased certainty will also contribute to the furtherance of the NGO and is consistent with the revenue and pricing principles.

2.3 Consistency with the revenue and pricing principles

The AEMC must take into account the revenue and pricing principles in making a rule with respect to any matter specified in items 40 to 48 of Schedule 1 to the NGL.[11] Items 40 and 43 apply to this final rule. Having regard to the issues raised by the rule change request, the Commission has considered each of the relevant revenue and pricing principles. The Commission is satisfied that the final rule is consistent with the relevant revenue and pricing principles.

In particular, the revenue and pricing principles state that service providers should be provided with a reasonable opportunity to recover at least the efficient costs they incur in providing reference services and complying with a regulatory obligation or requirement or making a regulatory payment.

11 NGL, s. 293.

The final rule will not limit the opportunity of service providers to recover the efficient costs of providing reference services. Under circumstances in which there is a material difference between estimated and actual capital expenditure in the final year of an access arrangement period, service providers will continue to have the opportunity to recover the efficient costs of conforming capital expenditure at the next setting of the opening capital base.

Further, the final rule will not undermine the incentive framework that operates to encourage service providers to provide reference services in an efficient manner. The overall incentive framework remains unchanged. This includes the overarching use of forecasts to determine the expected total regulated revenue and the reference tariffs for an access arrangement period.

The revenue and pricing principles also provide that regard should be had to the economic costs and risks of the potential for under- and over-investment by a service provider in a pipeline with which the service provider provides pipeline services. Regard must also be had to under- and over-utilisation of a pipeline with which a service provider provides pipeline services.

In relation to these principles, the final rule is expected to provide greater certainty to investors in pipeline services and provide appropriate signals with respect to the utilisation of pipelines. This would be achieved by preventing service providers from experiencing benefits or losses arising out of a difference between estimated and actual final year capital expenditure.

By providing a mechanism for the recovery of efficient costs of conforming capital expenditure in the case of an under-estimate and a resulting higher actual spend in the final year of an access arrangement period, the final rule effectively takes into account the risk for under- and over-investment in, and utilisation of, pipeline services.

Further explanation of the revenue and pricing principles and how they apply to this final rule is set out in Appendix A of this final rule determination.

2.4 Strategic priority

This rule change request relates to the AEMC strategic gas priority to promote the development of efficient gas markets. It affects the manner in which service providers recover the efficient costs of providing reference services provided by a pipeline. This rule change request also affects the prices that consumers of natural gas ultimately pay for their gas services.

3 Commission's assessment

This chapter explains the Commission's analysis and reasons for making the final rule and responds to certain submissions made by stakeholders.

Stakeholder submissions to the consultation paper and the draft rule determination ranged in response from clear support for the proposed rule, support for a more preferable rule, unsupportive of either, and preference for an entirely different approach to solving the issue raised by the AER in its rule change request.

The Commission has considered each submission closely and responds here to the key points raised by stakeholders. Further responses to these and other issues raised in stakeholder submissions are included in Appendix C.

3.1 To preserve the incentive framework of the regulatory regime

The Commission considers that the final rule preserves the incentive-based regulatory framework and acts to discourage service providers from inefficient, adverse actions that are not in the long term interests of consumers.

The building block approach to determining total revenue, which in turn is used to set reference tariffs, is part of a regulatory regime that is designed to encourage service providers to pursue capital expenditure efficiencies within each access arrangement period. As noted in the AER's rule change request, the framework operates to provide service providers with the opportunity to earn a return on the projected capital base for each year of an access arrangement period. This includes the opening capital base and forecast conforming capital expenditure.[12]

The function of this incentive framework is to encourage service providers to seek efficiencies that may create short-term benefits for themselves and contribute to lower prices for consumers over the long-term.

The Commission considers that the interpretation of rule 77(2)(a) by the Tribunal in the APA GasNet decision, that the AER is not entitled to make an adjustment for any benefit or penalty associated with any difference between the estimated and actual capital expenditure, has the potential to impact on the incentive framework of the regulatory regime.

By not requiring the economic regulator to make the relevant adjustment, service providers may be encouraged to over-estimate their capital expenditure in the final year of an access arrangement period because of the incentive to pursue revenue maximisation (by earning a return on the over-estimated capital expenditure).

This potentially adverse incentive may also encourage service providers to defer efficient capital expenditure into the next access arrangement period in preference to pursuing a return on capital associated with the estimated capital expenditure.

Conversely, if a service provider under-estimated its capital expenditure in the final year of an access arrangement period, and ultimately spent materially more in that period, it may not have the opportunity to recover the efficient costs it incurs in providing reference services. This is because the service provider would receive a return based on the lower estimated capital expenditure and not the higher actual capital expenditure.

This result would not accord with the revenue and pricing principles and would adversely affect the ability of service providers to recover the efficient costs in providing reference services.

Under the final rule, service providers would be made whole by allowing a return on capital on actual conforming capital expenditure, even in a circumstance where the actual conforming capital expenditure spent in the final year of an access arrangement period is more than the estimated capital expenditure for that year.

The Commission considers that the final rule effectively removes the potential for service providers to experience gains or losses associated with the difference between estimated and actual capital expenditure and preserves the operation of the incentive framework of the regulatory regime. Failure to remove the potential for these gains or losses to occur would expose service providers to new, likely unallocated risks and expose customers to tariffs that do not reflect the efficient cost of providing the reference service.

As a result, the final rule will provide greater certainty to investors in pipeline services and provide appropriate signals with respect to the utilisation of pipelines. This increased certainty will, or is likely to, contribute to the achievement of the NGO and is consistent with the revenue and pricing principles.

3.2 To further regulatory certainty and transparency

The Commission has also considered the importance of regulatory certainty and transparency in the methodologies used by the economic regulators to contributing to a stable investment environment and the promotion of the NGO.

The ability of the AER to make the relevant adjustment has twice been a subject included in an application for merits review of an AER access arrangement decision to the Tribunal. The Tribunal's decisions in relation to the AER's ability to make this adjustment were opposing. As a result, the economic regulators and service providers may now be uncertain about the scope and operation of rule 77(2)(a).

As noted above, in 2011 the Tribunal decided that an adjustment to the return on capital associated with the difference between estimated and actual capital expenditure could be made by the AER (the Jemena decision).[13] However, in 2013 the Tribunal

12 AER rule change request, 11 November 2013, p8.

13 Application by Jemena Gas Networks (NSW) Ltd (No 3) [2011] A CompT6 (Jemena decision).

decided that the AER was not empowered under rule 77(2)(a) to make the relevant adjustment (the GasNet decision).[14]

Subsequently, the AER announced its intention to submit this rule change request.[15] The Commission is mindful of the uncertainty that is evident from the differing findings in the relevant Tribunal decisions.

In submissions to the consultation paper, both the Energy Networks Association (ENA) and Jemena Gas Networks (JGN) considered that the proposed rule would provide clarity about the relevant adjustment.[16] The ENA also noted that the proposed rule is a proportionate response to the issues raised by the relevant 2011 and 2013 Tribunal decisions and may "materially improve predictability in the operation of the capital base provisions of the NGR".[17]

If the current rule is not amended, the uncertainty arising from the differing outcomes of the recent Tribunal decisions regarding whether the AER has the power to make the relevant adjustment will be very likely to persist.

The Commission considers the final rule effectively addresses this risk of continued uncertainty and provides greater clarity about the methodology the economic regulators will utilise when setting the opening capital base. It is therefore consistent with the NGO. The final rule also strikes a balance between providing regulatory certainty and providing the economic regulators with a level of discretion that is appropriate to implement the final rule and respond effectively to changes in circumstances.

APA, in its submission to the draft rule determination, submitted that it is inappropriate for the AEMC to refer to the AER's proposal as improving certainty as "a reason to accept the rule change".[18]

However, the Commission, in its draft rule determination did not consider the improvement of certainty as "a reason to accept" the AER's proposed rule change. Rather, the rationale for making the draft rule determination was based on the Commission's consideration that the proposed rule:

- preserves the incentive-based regulatory framework and acts to discourage the potential for inefficient, adverse incentives that are not in the long term interests of consumers;

- will safeguard against gains or losses not related to the efficiency of service providers from impacting on pipeline investment and usage incentives; and

14 Application by APA GasNet (Operations) Pty Ltd (No 2) [2013] A CompT8 (APA GasNet decision).

15 See AER media release here: https://www.aer.gov.au/node/21868.

16 JGN submission, 22 May 2014, p1; ENA submission, 23 May 2014, p2.

17 ENA submission, 23 May 2014, pp1-2.

18 APA submission, 21 August 2014, p2.

- will increase the likelihood that reference tariffs will reflect efficient utilisation of, and investment in, natural gas services and will be less likely to be distorted by gains or losses unrelated to the efficiency of service providers.

For these reasons, the draft rule reflected the proposed rule.

Improved certainty and transparency are, however, also relevant considerations in making this final rule. In general, regulatory certainty and transparency in the methodologies used by the economic regulators contributes to a stable investment environment and the promotion of the NGO.

This includes the method used to reconcile estimated and actual capital expenditure. Indeed, APA acknowledged in its submission to the draft rule determination that given the two conflicting Tribunal decisions interpreting rule 77(2)(a), there may be uncertainty in respect of the interpretation of this rule and that this rule could be clearer in its future application.[19]

The Commission acknowledges this. The history of the subject matter of this rule change request is marked by a lack of clarity and some dispute about the scope of rule 77(2)(a). The Commission is concerned that this uncertainty undermines a stable investment environment and the promotion of the NGO.

19 APA submission, 21 August 2014, p2.

4 Alternatives to the proposed rule

This chapter examines three alternatives to the proposed rule and discusses why the Commission has not made a more preferable rule to implement these alternatives. The alternative solutions are:

- alternative 1 - make a more preferable rule that restricts the relevant adjustment to return on capital only;
- alternative 2 - make a more preferable rule that provides the ERA flexibility to use a cash flow adjustment; and
- alternative 3 - make a more preferable rule that enables the relevant adjustment to be made to revenue through the tariff variation mechanism as proposed by DBP.

4.1 Alternative 1 - restrict the adjustment to return on capital

This alternative to the proposed rule was first raised in the consultation paper as a consideration as to whether the proposed rule was sufficiently precise and targeted in its intended application.[20] Part of the rationale of raising this consideration in the consultation paper related to the background to this rule change request, noted above at section 1.5. The Commission considered it desirable to consult on making a more preferable rule that was more targeted than the proposed rule and to alert stakeholders to this option.

Submissions to the consultation paper on this point were mixed. A number of stakeholders indicated their qualified support for this approach, broadly suggesting a more preferable rule that was confined expressly to return on capital would provide greater certainty and transparency than the AER's proposed rule.[21]

In the draft rule determination, the Commission decided not to make a more preferable rule restricting the relevant adjustment to return on capital only. This was because the wording of the proposed rule and the relevant historical practice was considered to provide sufficient clarity and certainty to affected parties as to the intended operation and application of the draft rule.

It was also considered that the proposed rule provided a level of discretion to the economic regulators to interpret and apply the relevant adjustment that is appropriate to the circumstance.[22]

Stakeholder submissions to the draft rule determination on this point were also mixed. A number of stakeholders maintained their view that the relevant adjustment should

20 AEMC, Setting the opening capital base, consultation paper, 17 April 2014, pp16-17.

21 See submissions from: JGN, 22 May 2014, p1; APA, 21 May 2014, p5; ENA, 23 May 2014, p1; and, APIA, 22 May 2014, p4.

22 AEMC, Setting the opening capital base, draft rule determination, 10 July 2014, pp16-18.

be expressly restricted to return on capital only and this should be reflected in any final rule.[23] However, other stakeholders supported the draft rule determination.[24]

APA reiterated its opposition to the proposed rule and submitted that if the AEMC determined to make a rule change in line with the AER's proposed rule, the scope of the rule needs to be better defined. APA also contended that the form of the draft rule "gives potentially far greater scope for adjustments that APA considers would be contrary to the incentives under the regime in respect of forecasts".[25]

APA also argued that the broad scope of the rule could be employed to "extend to the adjustment of decisions that are perceived to be consequent on a difference between estimated and actual expenditure and that are part of the forecast period".[26] It suggested that such adjustments could include operating expenditure, demand assumptions, or later capital expenditure that is perceived by the economic regulator to be linked to differences in capital expenditure in the estimated year.

While such adjustments would be "far beyond the scope of adjustments made by the AER in the past", APA argued if they were made they would significantly impact the incentive properties of the regime in respect of forecasts.[27] APA submitted that the ability to make such adjustments in respect of forecasts should be clearly prescribed.

Similarly, DBP submitted that the scope of the draft rule would allow "regulators to also assess qualitative differences between estimated and actual capital expenditure" and to "take account of benefits and/or penalties it perceives may have occurred as a result of these qualitative differences", such as "differences in subsequent investment or the provision of different services."[28]

Like APA, DBP argued that this broad scope has the "potential to 'open-up' expenditure in the forecast period" where it is perceived by the economic regulator "to be linked to a deviation between estimated and actual expenditure, and undermine the incentive properties of the regime".[29]

Noting that this has not occurred under the NER, which has the same benefit or penalty clause as the proposed rule,[30] DBP nonetheless submitted that the "risks associated with the mechanism proposed by the AER are too great, and the

23 See submissions from: APA, 21 August 2014; DBP, 21 August 2014; and ENA, 21 August 2014.

24 See submissions from: ERA, 12 September 2014; MEU, 20 August 2014; and JGN, 21 August 2014.

25 APA submission, 21 May 2014, p3.

26 ibid.

27 ibid.

28 DBP submission, 21 August 2014, p2.

29 ibid.

30 See Schedules 6.2.1(c)2 and 6.2.1(e)(3) for distribution network service providers and Schedules 6A2.1(c)2 and 6A2.1(f)3 for transmission network service providers.

consequences of adverse application of the rule too pernicious for this mechanism to be used."[31]

In contrast, ERA submitted that it is not necessary to amend the wording of the draft rule as it allows the relevant regulator to make adjustments appropriate to the circumstance.[32] It submitted that "flexibility is required rather than a tightly prescribed rule as suggested by APA Group."[33]

DBP noted that the NGR defines forecasts and estimates differently and this appears to demonstrate an intent in energy policy that estimates not form part of the incentive framework. It then commented that it would be incorrect to conclude that the proposed rule would remove the incentive properties of estimates. DBP argued that there is no "incentive free" option available to the Commission and that its consideration of this matter should centre on which option imposes the least distortionary impact on the underlying incentive properties of the framework.[34]

Commission's assessment

As noted above, the draft rule did not alter the wording included in the proposed rule to limit the adjustment to return on capital only.

The Commission is not persuaded by submissions to the draft rule determination that the final rule should be different to the draft rule.

Under s. 296 of the NGL, the AEMC may make a more preferable rule if the AEMC is satisfied that, having regard to the issue(s) raised by the proposed rule, the more preferable rule will, or is likely to, better contribute to the achievement of the NGO. The Commission has not formed this view.

In making this decision, the Commission has considered the potential impact of the alternative rule. Expressly confining the adjustment to return on capital may appear to provide greater certainty than the proposed rule. This may be particularly salient for service providers concerned about "regulatory creep", in which there is a perceived risk that an economic regulator may re-characterise the known target(s) of the relevant adjustment into something other than what has been included (the return on capital) to date.

However, there may be other legitimate benefits or penalties arising from the difference between estimated and actual capital expenditure. It would be appropriate for the regulators to be able to make such required adjustments. Moreover, if an economic regulator were to extend the relevant adjustment to other properly characterised, estimate-related costs, such as equity raising costs or directly attributable operating expenditure costs, these costs are likely to be immaterial relative to the

31 DBP submission, 21 August 2014, p2.

32 ERA submission, 12 September 2014, p6.

33 ibid.

34 DBP submission, 21 August 2014, p1.

return on capital component of the adjustment. AEMC discussions with the ERA and the AER confirm this understanding.

Regarding APA's submission seeking to proscribe the ability of the economic regulator to make, and apply, the relevant adjustment to forecasts, the Commission does not consider either economic regulator could use the adjustment mechanism in this manner. The purpose of the proposed rule is, as the AER stated in its rule change request, to provide for full adjustments to the opening capital base for the accumulated return on capital on the difference between estimated and actual capital expenditure in the final year of an access arrangement period.[35]

The Commission remains of the view that the wording of the proposed rule and the relevant historical practice provide sufficient clarity and certainty to all affected parties regarding the intended operation, scope and application of the proposed rule.

It also considers that the proposed rule provides an appropriate balance of clarity to stakeholders and limited discretion to the economic regulators to interpret and apply the relevant adjustment that is appropriate to the circumstance.

As DBP has noted, the regulatory framework under the NGR defines estimates and forecasts differently. Forecasts are an important aspect of the overall incentive framework. However, any "incentives" associated with estimates are not part of this framework.

The Commission acknowledges that the treatment of estimates within the incentive framework may encourage or discourage certain behaviour. However, the proposed rule does not purport to remove any such "incentives" associated with estimated capital expenditure.

Conclusion

The Commission has considered restricting the benefit or penalty adjustment in the proposed rule to the return on capital. However, it has concluded that the scope of the proposed rule is appropriate and sufficiently clear. The proposed rule provides some discretion to the regulators; however, having regarding to the context, this is not excessive. Accordingly, it appears that including the reference to return on capital in rule 77(2)(a) is not necessary to achieve the desired function of the rule.

For these reasons, the Commission does not consider that a more preferable rule confining the scope of the adjustment to return on capital will, or is likely to, better contribute to the achievement of the NGO when compared to the proposed rule.

4.2 Alternative 2 - ERA's cash flow adjustment

In response to the consultation paper, the ERA raised the prospect of making the relevant adjustment using a different method to that provided by the proposed rule.

35 See AER rule change request, 11 November 2013, p1.

The ERA supported the AER's rationale for the rule change request and agreed that an amendment to the NGR is necessary. However, it submitted that the NGR should provide for alternative methods to be used to make the relevant adjustment.[36]

Specifically, the approach preferred by the ERA is to make the relevant adjustment as a one-off cash flow adjustment to the first year in the applicable access arrangement period, or, alternatively, to apply the adjustment over the remainder of the access arrangement period. This could be implemented through an amendment adding an extra component to rule 76 regarding total revenue.

The ERA submitted that the AER's approach would result in a slow and drawn out adjustment taking effect over the life of the relevant assets in the capital base. This is because of the practice of capitalising the adjustment amount over the remaining asset life by including it in the calculation of the opening capital base.

The ERA considered its cash flow approach would allow it and service providers to make and implement the adjustment as soon as practicable. Under this approach, the ERA submitted that prices would revert to efficient levels faster (at most, by the end of the access arrangement period). This would provide appropriate economic signals to customers and be consistent with the NGO. That is, according to the ERA, its cash flow approach would be a quicker, cleaner method of accomplishing the same objective of the AER's proposed rule. In addition, it would appropriately treat the return on capital as a cash flow.

Price volatility

MEU, in its submission to the draft rule determination, also expressed some support for the ERA approach and noted that costs to consumers would be recovered more quickly.[37] That is, like the ERA, the MEU regarded the faster impact of the reconciliation as positive.

However, the ERA has acknowledged that there is the potential for greater price variation in the short term.[38] The degree of price variation would be influenced by a service provider's compliance with rule 74 in forming its estimate. It would also vary according to whether the adjustment was completed in the first year of the access arrangement period or if the adjustment was smoothed out across the remainder of the access arrangement period. The degree of price volatility would also depend on the amount of the adjustment required.

In regard to this issue, the ERA noted that its modelling exercise indicated "the difference between estimated and actual capital expenditure would have to be considerably large in order for there to be a material price variation" under their preferred approach.[39] The Commission acknowledges this proposition and does not

36 ERA submission, 30 May 2014, p3.

37 MEU submission, 20 August 2014, p2.

38 ERA submission, 12 September 2014, p3.

39 ibid, p4.

consider the risk of material price variation to be significant under the ERA's preferred approach.

Depreciation

In its submission to the draft rule determination, ERA noted that it undertook an extensive modelling exercise to test the impacts of making the relevant cash flow adjustment on the revenue building blocks and the capital base.[40]

Through the modelling exercise, the ERA found that it was not possible to adjust correctly "for the estimation error for final year capital expenditure in period n by simply removing the estimation error in full from the regulatory asset base in period n+2."[41] This was because depreciation would occur in period n+1 for the overestimate in capital expenditure and would result in extra cash flows for the service provider. ERA noted the obverse would occur in the case of an underestimate of capital expenditure, also requiring an adjustment for cash flows associated with depreciation.[42]

The AER has also commented to the AEMC on the impact of depreciation. The AER has indicated that a consequent adjustment is made for return of capital (depreciation) when making the return on capital adjustment using the proposed rule. However, and unlike the return on capital adjustment, the return of capital adjustment is done automatically through, and is already incorporated into, the roll forward model when the value of the capital base is changed.[43]

Rule 77(2)(d) provides for the opening capital base calculation to reflect depreciation. This refers to depreciation in the sense of the 'use of' the asset during the current access arrangement period. In addition, any conforming capital expenditure that is added to the capital base may also depreciate during the access arrangement period in the same way.

Similarly, the adjustment made for the difference between estimated and actual capital expenditure will create an adjustment to depreciation. All these changes relate to the change made regarding the physical asset. However, capitalising the rate of return associated with the difference between the estimated and actual capital expenditure creates a change in the value of the capital base that is not related to the physical asset. Nonetheless, the capitalisation will have the consequent effect of a change to depreciation.

40 ibid, pp3-4.

41 ibid.

42 ibid.

43 Under clause 6.5.1 of the NER, the AER must develop and publish the roll forward model (RFM). The RFM is a set of Microsoft Excel spreadsheets that derive a closing regulatory asset base for the current regulatory control period from a given set of inputs relating to capital expenditure, asset disposals, customer contributions, inflation and the rate of return. The RFM and the RFM handbook are available from the AER website.

As with the method under the proposed rule, the ERA would also need to make a subsequent adjustment to depreciation to maintain the relationship between the capital base and depreciation. The approach under the proposed rule is reasonably understood by service providers, given it is also applied by the AER to electricity service providers. However, the detail of the ERA's approach and how it would address this depreciation issue is, at this stage, not clear.

Application

The ERA has suggested that the return on capital adjustment required to be made from the difference between the estimated and actual capital expenditure can be made through the cash flows.

In the same way as would occur under the proposed rule, the calculation of the amount to be adjusted firstly requires the calculation of the difference between the estimated and actual capital expenditure. However, this is not simply an acceptance of the actual capital expenditure by the regulator. It requires an assessment of what actual capital expenditure satisfies the conforming capital expenditure test in rule 79. In practice, a regulator may use the assistance of an expert to make this assessment.

Thus, the difference between the proposed rule and the cash flow method is one of timing in regard to the assessment of actual capital expenditure. However, this change in timing is likely to create some additional administrative burden for the regulator and the service provider in comparison to the approach under the proposed rule.

Conclusion

In its submissions, the ERA has effectively proposed the making of a more preferable rule that incorporates both the AER's reconciliation method and its own.[44] The ERA has stated that it considers "the final rule determination should provide the relevant regulator flexibility as to which approach it applies" to make the relevant adjustment.[45]

As noted above, the AEMC may make a more preferable rule if it is satisfied that, having regard to the issues raised by the proposed rule, the more preferable rule will, or is likely to, better contribute to the achievement of the NGO. There are three key issues in considering this.

Choice

The ERA stated that the NGR should provide the regulator with the choice of adjustment method when setting an opening capital base. However, this does not appear to accord with the general propose-respond approach of the gas access regime. Generally, service providers propose revised access arrangements for a pipeline.

Having two approaches in the NGR to reconcile the difference in rate of return associated with estimated and forecast capital expenditure creates a choice for service

44 ibid, p3.

45 ibid.

providers relative to the proposed rule. A more preferable rule that provides service providers with an option as to which method the relevant adjustment should be made under may inadvertently create some uncertainty. Such uncertainty may be enhanced if the NGR is not clear about how the regulator is to assess a service provider's choice of adjustment methodology. However, some service providers may value the ability to select a method that is relevant to their circumstance.

Additional, untested approach

Second, the Commission considers that, on balance, adding an additional, new, and untested process to the building block approach may create additional uncertainty regarding its operation.

Specifically, the ERA's preferred rule would involve adding a new element to the total revenue under rule 76 to effect the same outcome as the proposed rule while also making an amendment similar to the proposed change to rule 77(2)(a).[46] However, the amended rule 76 would not set out how the cash flow method would be applied.

Given the background to this rule change request, some service providers and the AER have experience with and an understanding of the operation of the proposed rule. The proposed rule appears to be functional and relatively familiar in comparison to the cash flow method.

Moreover, this approach may increase the administrative burden by requiring the economic regulator to conduct a capital expenditure review immediately following the relevant access arrangement in order to test the relevant capital expenditure against the requirements in rule 79. Relative to the proposed rule, these steps and processes would require some time and additional resources for the economic regulator and service provider.

Proportionality

Third, the effect of ERA's suggestion is to create a choice between two adjustment methods in the NGR. The Commission has considered this in light of the potential scope of the adjustment that could reasonably be made. It considers that a framework to provide service providers with a choice on making the required adjustment is not necessary, or is out of proportion, to resolve the issue identified in the rule change request.

While choice is generally a benefit to parties, in this case it does not appear necessary to resolve the key concerns of the rule change request – to clarify that a reconciliation regarding the return on capital associated with the difference between estimated and actual capital expenditure is required to when setting the capital base for an access arrangement period.

46 This would also likely require a change to the proposed rule to remove its mandatory "must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure" to more permissive language to reflect the proposed optionality under the ERA approach.

The Commission acknowledges that a cash flow adjustment method has some benefits to service providers and consumers. However, to include this as part of a preferred rule that provides for one of two calculation methods to be used does not, at this time, appear to be more likely to meet the NGO.

For these reasons, the Commission does not consider that a more preferable rule incorporating both the AER and the ERA approaches will, or is likely to, better contribute to the achievement of the NGO than the proposed rule.

4.3 Alternative 3 - DBP's tariff variation mechanism approach

In its submission to the draft rule determination, DBP outlined its preferred method to making the relevant return on capital adjustment. This is to adjust revenue via the tariff variation mechanism as soon as practicable after the start of the access arrangement period immediately following the estimate. Like the ERA's cash flow approach, DBP suggested that the relevant adjustment should be made to revenue, not the capital base.

DBP proposed that the adjustment could be reflected in the first year, or over the remainder of the access arrangement period to minimise the price impact on customers, through the operation of the reference tariff variation mechanism under rule 92.[47]

DBP noted that because the relevant adjustment would be happening soon after the difference arises, any price impact would be likely to be minor.[48] This is because the amount to adjust would be smaller when compared to the AER method where the adjustment is made usually five years later. DBP proposed that this approach would benefit from changes to the NGR to clarify that such an adjustment could be made through the tariff variation mechanism during the first year of the next access arrangement period that immediately follows.

The ERA commented that although the DBP approach could work in theory, it considered that there would be implementation issues. For example, this approach would require a subsequent review of capital expenditure following a decision to approve an access arrangement to ensure the relevant capital expenditure amounts were compliant with rule 79. This could require the appointment of an external technical advisor. As a result, this approach, the ERA suggested, would increase the regulatory burden for both the service provider and the relevant regulator.[49]

The Commission does not consider the DBP approach will, or is likely to, better contribute to the achievement of the NGO than the proposed rule. Similar to the above reasoning in respect of the ERA cash flow approach, adding a new, untested process to making the relevant adjustment may create additional complexity relative to the alternative. Including an additional factor to the annual tariff control formula would

47 DBP submission, 21 August 2014, p3.

48 ibid, p4.

49 ERA submission, 12 September 2014, p5.

result in a more complex tariff calculation. Similar to the cash flow approach, implementing the rate of return adjustment through tariffs could result in some price volatility. Although, as noted by the ERA, it is likely that this would only arise where there is a significant difference between estimated and actual capital expenditure.

DBP's tariff variation approach would also increase the administrative burden associated with the annual tariff variation mechanism in the relevant year by requiring the economic regulator to conduct a capital expenditure review immediately following the relevant assessment and approval process for an access arrangement in order to test the actual capital expenditure against the requirements in rule 79.

This capital expenditure review may also include the economic regulator appointing an external technical advisor. These steps and processes would require more time and some additional resources for the economic regulator and service provider.

Relative to the proposed rule, the administrative burden of DBP's tariff variation approach is greater and not outweighed by any potential efficiency benefits to be gained from making the relevant adjustment sooner and to revenue.

For these reasons, the Commission does not consider that a more preferable rule implementing the DBP tariff variation approach to making the relevant adjustment will, or is likely to, better contribute to the achievement of the NGO than the proposed rule.

Abbreviations

AAP	access arrangement period
ACT	Australian Competition Tribunal
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
APIA	Australian Pipeline Industry Association
COAG	Council of Australian Governments
ENA	Energy Networks Association
ERA	Energy Regulation Authority
JGN	Jemena Gas Networks
MCE	Ministerial Council on Energy
NEL	National Electricity Law
NEO	national electricity objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	national gas objective
NGR	National Gas Rules
OCB	opening capital base
RPP	revenue and pricing principles
SCER	see COAG Energy Council

A Legal requirements under the NGL

This appendix sets out the relevant legal requirements under the NGL for the AEMC to take into account in making this final rule determination.

A.1 Final determination

In accordance with s. 311 of the NGL, the Commission has made this final rule determination in relation to the rule proposed by the AER.

A.2 Commission's power to make the rule

The Commission is satisfied under s. 291(1) of the NGL that the final rule will, or is likely to, contribute to the achievement of the NGO as set out in s. 23 of the NGL. It is also satisfied that the final rule falls within the subject matter about which the Commission may make rules, as set out in s. 74 of the NGL.

Specifically, the final rule relates to regulatory economic methodologies and the economic regulatory function or powers in respect of the regulatory economic methodologies (including the building block approach), as specified in item 40 of Schedule 1 to the NGL, to be applied by the economic regulator in approving or making revisions to an applicable full access arrangement.

The final rule also relates to the capital base with respect to a covered pipeline, and of a new facility for the purposes of approving revisions or a variation to an applicable access arrangement that is a full access arrangement.[50]

Further, the final rule affects the way in which the economic regulator performs or exercises an economic regulatory function or power, including the basis on which it makes an economic regulatory decision.[51]

Lastly, the final rule also affects the principles to be applied, and the procedures to be followed, by the economic regulator in exercising or performing an economic regulatory function or power.[52]

A.3 Commencement of the rule making process

On 17 April 2014, the Commission published a notice advising of its intention to commence the rule making process and the first round of consultation in respect of the rule change request. A consultation paper prepared by AEMC staff identifying specific issues and questions for consultation was published with the rule change request.

50 See item 43 of Schedule 1 to the NGL.

51 See item 49 of Schedule 1 to the NGL.

52 See item 50 of Schedule 1 to the NGL.

The period for submissions on consultation paper closed on 22 May 2014. Five submissions were received; each is available on the AEMC website.

The period for submissions on the second round of consultation closed on 21 August 2014. The Commission received six submissions; each is also available on the AEMC website.

A summary of issues raised in the second round of submissions, and the Commission's responses, is provided at Appendix C.

A.4 Revenue and pricing principles

Under s. 293 of the NGL, the Commission must take into account the revenue and pricing principles for any matter or thing specified in items 40 to 48 of Schedule 1 to the NGL. The Commission has taken into account the revenue and pricing principles in this final rule determination because the final rule relates to matters specified in items 40 and 43 of Schedule 1 to the NGL. Having considered the issues raised by the AER, the proposed rule, and submissions from stakeholders, the Commission has concluded that the final rule is consistent with the revenue and pricing principles.

The revenue and pricing principles are set out in s. 24 of the NGL. They include a number of principles concerning matters such as the recovery of efficient costs, incentives to promote efficiencies, and the principle that prices should reflect returns commensurate with the risks involved in providing the reference services.

Section 24(2)(a) of the NGL relevantly states that service providers should be provided with a reasonable opportunity to recover at least the efficient costs they incur in providing reference services. The Commission considers that the final rule will not reduce the opportunity of service providers to recover at least the efficient costs in providing reference services.

The revenue and pricing principles also state that service providers should be provided with effective incentives in order to promote economic efficiency with respect to the reference services they provide.[53] The economic efficiency that should be promoted includes:

- efficient investment in, or in connection with, a pipeline with which the service provider provides reference services;
- the efficient provision of pipeline services; and
- the efficient use of the pipeline.

By providing for the ability to recover efficient costs of conforming capital expenditure in the case of an under-estimate and a resulting higher actual spend in the final year of an access arrangement period, the final rule effectively promotes the efficient use of, and investment in, pipelines and the efficient provision of pipeline services.

53 See NGL, s. 24(3).

The revenue and pricing principles also require regard to be had to the economic costs and risks of the potential for under- and over-investment by a service provider in a pipeline with which the service provider provides pipeline services. The principles also require consideration of the economic costs and risks of the potential for under- and over-utilisation of a pipeline with which a service provider provides pipeline services.[54]

As noted in Chapter 3, the Commission considers the final rule will provide greater certainty to investors in pipeline services, and provide appropriate signals with respect to the utilisation of pipelines. This will be achieved by preventing service providers from experiencing benefits or losses arising out of a difference between estimated and actual final year capital expenditure.

A.5 Participating jurisdictions

The final rule applies to each participating jurisdiction, including Western Australia. Under s. 21 of the NGL, the participating jurisdictions are each of the states of New South Wales, Victoria, Queensland, Western Australia and Tasmania, the Commonwealth, the Australian Capital Territory and the Northern Territory.

The final rule applies in Western Australia as it falls within the subject matters about which the Commission may make rules under the *National Gas Access (WA) Act 2009*.

A.6 Commission's considerations

In assessing the rule change request, the Commission had regard to:

- the Commission's powers under the NGL to make the rule;
- the rule change request;
- the fact that there is no relevant Ministerial Council on Energy (MCE) Statement of Policy Principles;
- submissions received during the first and second rounds of consultation;
- the ways in which the proposed rule will, or is likely to, contribute to the achievement of the NGO; and
- the revenue and pricing principles.

54 See NGL, s. 24(6).

B Regulatory approach

This appendix discusses briefly the relevant current economic regulatory approach and fundamental elements of the methodology used by the economic regulators when setting the opening capital base under the NGR. These provisions are relevant to pipelines that are subject to full economic regulation under Part 9 of the NGR and consequently have a "full access arrangement" in place.[55]

B.1 Setting the opening capital base

Under rule 76 of the NGL, the total revenue for each year of an access arrangement period is derived using the building block approach that combines:

- a return on the projected capital base for the year;
- depreciation on the projected capital base for the year;
- the estimated cost of corporate income tax for the year;
- increments or decrements for the year resulting from the operation of an incentive mechanism to encourage gains in efficiency; and
- a forecast of operating expenditure for the year.

Once determined, total revenue is used, with demand information over the access arrangement period, to calculate the reference tariff for each reference service.

Rule 78 defines the projected capital base component of total revenue to comprise:

- the opening capital base; plus
- forecast conforming capital expenditure for the period; less
- forecast depreciation for the period; and
- the forecast value of pipeline assets to be disposed of in the course of the period.

The opening capital base is the value of a service provider's regulated assets at the beginning of an access arrangement period. The method the economic regulator must use when calculating the opening capital base is determined by rule 77 of the NGR.

In order to calculate the opening capital base for the next access arrangement period, it is necessary to begin by determining the opening capital base at the commencement of

55 There are two other types of access arrangements: "limited access arrangements" that may be submitted for pipelines that are the subject of light regulation (light regulation includes regulatory oversight of non-price aspects of access to the pipeline, it does not include economic regulation); and "CTP access arrangements" for pipelines that have been built in accordance with the competitive tender process provisions of Part 5 of the NGR.

the current access arrangement period and make a number of adjustments reflecting changes that have occurred during the period. Relevantly, this includes an adjustment for any difference between the estimated and actual capital expenditure for the final year of the preceding access arrangement period included in that opening capital base.

Under rule 77(2), if an access arrangement period follows immediately on the conclusion of a preceding access arrangement period, the opening capital base for the later access arrangement period is to be:

- the opening capital base as at the commencement of the earlier access arrangement period (adjusted for any difference between estimated and actual capital expenditure included in that opening capital base); plus
- conforming capital expenditure made, or to be made, during the earlier access arrangement period; plus
- any amounts of capital expenditure to be added to the capital base under rules 82, 84, or 86; less
- depreciation over the earlier access arrangement (to be calculated in accordance with any relevant provisions of the access arrangement governing the calculation of depreciation for the purpose of establishing the opening capital base); and
- redundant assets identified during the course of the earlier access arrangement period; and
- the value of pipeline assets disposed of during the earlier access arrangement period.

B.2 Capital expenditure

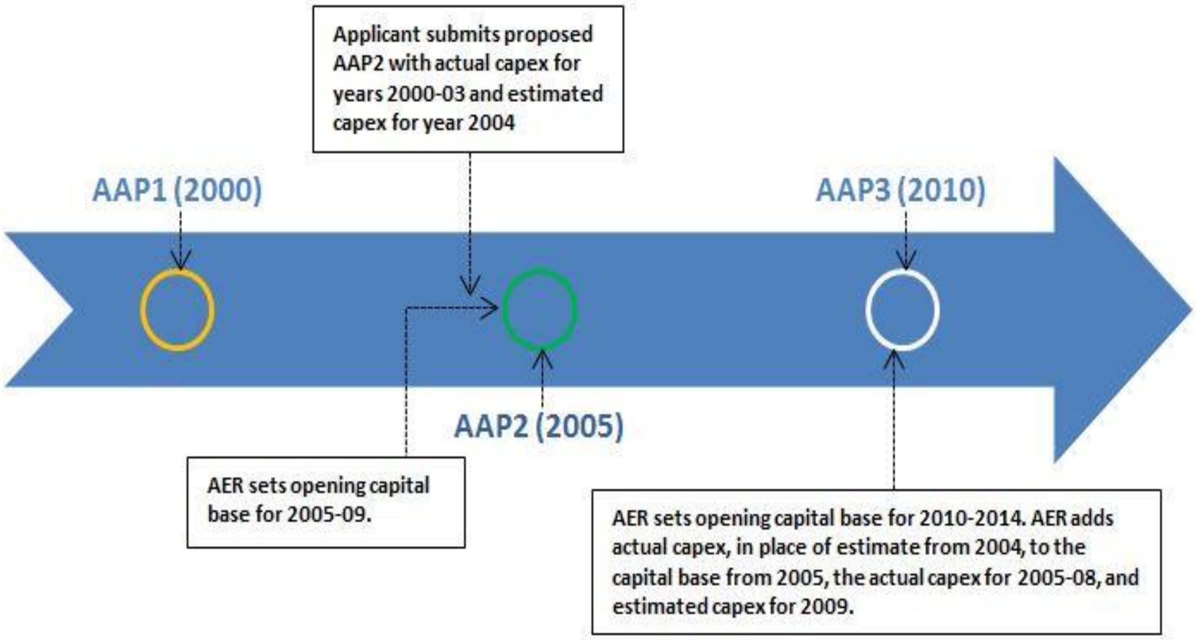
Capital expenditure is defined in rule 69 of the NGR to mean those costs and expenditures of a capital nature incurred to provide, or in providing, pipeline services. This includes expenditure on compressors, looping and extensions to the pipeline (that is, the construction of physical assets).

Due to timing constraints around the submission of a proposed revised access arrangement, it is not possible for a service provider to report actual capital expenditure for the final year of the current access arrangement period as the year has yet to end.

For this reason, the opening capital base often includes actual capital expenditure for the earlier years of an access arrangement period (for example, years one to four of a five year period) and estimated capital expenditure for the final year of the access arrangement period (for example, year five). This estimate will include actual capital expenditure to the extent available and an estimate of what is proposed to be incurred over the remainder of the final year, which may only be the final three months of the access arrangement period.

The timeline below depicts an example of when this may occur.

Figure B.1 Example access arrangement proposal submission and decision timeline



Source: AEMC.

In its rule change request, the AER included an example that demonstrates the impact of the proposed rule change in which the access arrangement covers the following hypothetical periods:

- access arrangement period 1 (AAP1) - years 1-5
- access arrangement period 2 (AAP2) - years 6-10
- access arrangement period 3 (AAP3) - years 11-15

The initial opening capital base for AAP1 is assumed to be set in year zero and revised at the end of the final years of each access arrangement period (that is, years 5, 10, and 15).

The AER notes that when setting the opening capital base for year 11 in AAP3, it has been its practice to make both the difference and return on capital adjustments to the capital base to account for the difference between the year five capital expenditure estimate and the actual value of capital expenditure in year five. Year 11 of AAP3 is the first opportunity for an adjustment to return on capital, accumulated over years 6-10, to be made consistent with the proposed rule.

The relevant adjustment, as proposed, would involve removing or adding to the opening capital base for year 11 the accumulated gain or loss that arises out of any difference between the estimated and actual capital expenditure for the final year (year five) of AAP1.

B.3 Return on capital

Return on capital forms part of the building block approach to determining the revenue of a service provider. Calculating the return on capital is done by multiplying the allowed rate of return by the opening capital base for each year of the access arrangement period, resulting in an accumulated rate of return.

The allowed rate of return is determined according to rule 87 of the NGR, which stipulates that it is to be determined such that it achieves the allowed rate of return objective set out in rule 87(2) of the NGR. The allowed rate of return objective requires that the rate of return for a service provider is to be commensurate with the efficient financing costs of a benchmark efficient entity with a similar degree of risk as that which applies to the service provider in respect of the provision of the reference services relevant to the particular pipeline.[56]

B.4 Return of capital (depreciation)

When determining the total revenue, the economic regulators must assess the depreciation of the projected capital base, referred to as the return of capital, under rule 76(b).

Depreciation represents the allowance that the service provider can collect for depreciation of its capital base and is one of the building blocks used to determine total revenue.[57]

Under rule 77(2)(d), the opening capital base is to be calculated such that depreciation over the earlier access arrangement period is deducted.

The economic regulators assess whether the proposed depreciation schedule complies with the depreciation criteria set out below.

Rules 88 and 89 set out the form of a depreciation schedule, which must be designed as follows:

- so that reference tariffs will vary, over time, in a way that promotes efficient growth in the market for reference services; and
- so that each asset or group of assets is depreciated over the economic life of that asset or group of assets; and

56 NGR, rule 87(3).

57 See Appendix B.1.

- so as to allow, as far as reasonably practicable, for adjustment reflecting changes in the expected economic life of a particular asset, or a particular group of assets; and
- so that an asset is depreciated only once; and
- so as to allow for the service provider's reasonable needs for cash flow to meet financing, non-capital and other costs.

Rule 90 provides for calculation of depreciation for determining the opening capital base from one access arrangement period to the next and requires a full access arrangement to contain provisions governing the calculation of depreciation for establishing the opening capital base for the next access arrangement period. The access arrangement must also detail whether depreciation is to be based on forecast or actual capital expenditure.

B.5 Reference tariff variation mechanism

The reference tariff variation mechanism, under rule 92, defines how reference tariffs may be varied during the course of an access arrangement period.

Specifically, the reference tariff variation mechanism:

- permits building block revenues to be recovered smoothly over the access arrangement period;
- accounts for actual inflation;
- accommodates other tariff adjustments that may be required, such as for an approved cost pass through event; and
- sets administrative procedures for the approval of any proposed changes to tariffs.

The economic regulators are required to assess the reference tariff variation mechanism included in an access arrangement against the requirements of rules 92 and 97. Rule 97 details the mechanics of a reference tariff variation mechanism.

C Summary of issues raised in submissions

C.1 First round of consultation

During the first round of consultation, the AEMC received submissions from the following stakeholders:

- APA Group (APA);
- Australian Pipeline Industry Association (APIA);
- Energy Networks Association (ENA);
- Economic Regulatory Authority (ERA); and
- Jemena Gas Networks (JGN)

Each submission is available for review on the AEMC website: www.aemc.gov.au.

C.2 Second round of consultation

Stakeholder	Issue	AEMC response
APA Group (APA)	APA reiterated that it does not support the proposed rule as it is not consistent with the NGO. APA argued that although the proposed rule may not impact the incentive framework, this does not mean that it will not impact incentives for expenditure. It may override the power of the incentive framework in the final year of	See Chapter 2 for discussion on the final rule and the NGO. The Commission does not consider the final rule will impact on the broad incentive framework. The final rule will promote the NGO and is consistent with the relevant revenue and pricing

Stakeholder	Issue	AEMC response
	the relevant period. APA reiterated its view that the Tribunal's interpretation of rule 77(2) in the APA GasNet decision is preferable and should be maintained. APA submitted that the scope and wording of the proposed rule is too broad and needs to be better defined. Otherwise, it gives the regulator potentially far greater discretion and scope for adjustments and impact on forecast capital expenditure. These potentially broader adjustments would not be consistent with the NGO or the RPP and should be excluded from the scope of the relevant adjustment.	principles. For the reasons detailed in Chapter 3, this rule change will prevent service providers from experiencing benefits or losses arising out of a difference between estimated and actual capital expenditure. See section 4.1. The level of discretion is appropriate for the economic regulator to make the relevant adjustment.
Dampier Bunbury Pipeline (DBP)	DBP submitted that although the NGR defines forecasts and estimates differently, and this appears to demonstrate an intent in energy policy that estimates not form part of the incentive framework, it is, however, incorrect to conclude that the proposed rule would remove the incentive properties of estimates. The Commission's consideration of this matter should centre on which option imposes the least distortionary impact on the underlying incentive properties of the framework. The proposed rule allows regulators also to assess qualitative differences between estimated and actual capital expenditure and to take account of benefits and/or penalties it perceives may have occurred as a result. The scope of adjustment should be more clearly defined, and confined to direct impacts on the opening capital base arising out of the difference between estimated and actual	See section 4.1. The final rule does not remove any "incentives" associated with the estimate of capital expenditure. See section 4.3. The Commission considers adding a new, untested process to making the relevant adjustment may create additional complexity. Including an additional factor to the annual tariff variation mechanism would result in a more complex tariff calculation. This approach would increase the administrative burden associated with the annual tariff variation mechanism by requiring the economic regulator to conduct a capital expenditure review immediately following the approval of an access arrangement in order to test the actual capital

Stakeholder	Issue	AEMC response
	capital expenditure. DBP's preferred form of making the relevant adjustment is to revenue, not the capital base. The adjustment could be made via the tariff variation mechanism and reflected over the remainder of the access arrangement period.	expenditure. The final rule does not include the DBP method.
Energy Networks Association (ENA)	ENA supported the rule change proposal, considering the draft rule may improve transparency and predictability in the operation of the capital base provisions of the NGR and benefit consumers by avoiding unnecessary ambiguity and reducing the potential for costly disputes. The draft rule would strengthen the incentive framework of the regulatory regime and improve regulatory certainty and clarity. ENA also reiterated its in principle support for the potential alternative to the proposed rule that expressly restricts the relevant adjustment to the return on capital component, both in the NER and the NGR, and suggested this approach would increase the predictability of the regulatory regime.	See section 4.1 for discussion of this issue.
Economic Regulatory Authority (ERA)	ERA reiterated its preference for its proposed approach and argued for flexibility to be included in the NGR to be able to utilise this method of adjustment. ERA considered its preferred approach would allow it and service providers to deal with the adjustment as soon as practicable and submitted that prices would revert to efficient levels faster and is a quicker, cleaner method of accomplishing the same objective of AER's proposed rule	See section 4.2 for discussion of this issue. The final rule does not include the ability to choose an adjustment method.

Stakeholder	Issue	AEMC response
Jemena Gas Networks (JGN)	JGN expressed its support for the draft rule, noting its administrative simplicity and alignment with the NER, while also ensuring that the adjustment is subject to the price review process and is spread over a full access arrangement period avoiding price volatility.	The Commission notes JGN's support for the draft rule. The relevant adjustment is not made over an access arrangement period. The adjustment is spread over the remaining asset life by including it in the calculation of the opening capital base.
Major Energy Users (MEU)	The MEU indicated its support for the proposed rule and the draft rule. However, the MEU expressed concern that the issue of price stability featured prominently in the draft rule determination. MEU suggested quicker recovery of costs to consumers, at the expense of price stability, may be preferred. MEU also noted some support for the ERA proposal in its submission to the consultation paper.	Achieving an appropriate balance between price stability and the recovery of costs to consumers in this rule change request is an important consideration. The Commission considers, on balance, the final rule achieves this. See section 4.2 for further discussion on this issue.