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Australian Energy Market Commission
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GRC0025: National Gas Amendment (Setting the Opening Capital Base) Rule 2014

The Australian Pipeline Industry Association (APIA) welcomes the opportunity to comment on the Commission's consultation paper on the change to the National Gas Rules (NGR) proposed by the Australian Energy Regulator (AER) to allow the AER to adjust the return on capital where actual capital spend is different to that estimated under certain circumstances.

In APIA's view, there are three key reasons why the AER's arguments do not support a rule change:

- **A logical reason:** the AER uses the same efficiency and incentive arguments to argue for an adjustment in the case of estimates and against an adjustment in the case of forecasts. Estimates and forecasts are just two different terms reflecting decisions made under uncertainty, and there is no logical reason for the incentive properties to be different in each case.
- **A legal reason:** the AER has drafted the rule change in such a way as to apply to a much broader range of benefits and penalties than it says it wishes to address. The AEMC has recognised this, and APIA considers that any change, if made, should limit its scope to as to address the specific issues that the AEMC considers need addressing.
- **An economic reason:** the AER does not appear to appreciate the way in which its proposal creates perverse investment incentives and could lead to regulatory gaming.

APIA notes that the Competition Tribunal has allowed the AER to claw-back the returns associated with differences between estimated and actual investment in one instance but has disallowed it in another instance; both cited by the AER. A rule change may therefore be necessary to ensure that the Rules are very clear that differences between actual and estimated and actual and forecast are treated in the same way; with no claw-back or refund. APIA is less inclined to the view that consistency between the NGR and NER is a necessary requirement (or even desirable), given differences between the two industries and their regulation (other than this point).

This submission has two parts. The first outlines the three reasons not to support the rule change noted above. The second is devoted to answering the specific questions posed by the AEMC, with reference to the information provided in the first part.

Reasons against supporting the rule change

APIA considers that the Rule change is unnecessary and based on an incorrect understanding of the operation of the gas access regime, the incentives on service providers and the power of the regulator under that regime.

The logical reason

At present, as the AER points out in its proposed rule change, if there are three access arrangement periods (AA1, AA2 and AA3), when it sets prices for AA2, it needs to rely upon an estimate for the capital expenditure in the last year of AA1, because, typically, the AA2 access determination is ongoing during the last year of AA1. The AER contends that this estimate operates as a "placeholder", and is updated at the commencement of AA3, where the estimated last-year AA1 capital expenditure is replaced by actual capital expenditure from that year for the purposes of rolling forward the asset base. The actual capital expenditure from AA2 (with the exception of the final year; where an estimate is used for the same reason as at the end of AA1) similarly replaces the capital expenditure forecast for AA2 at its outset for the purposes of rolling forward the asset base.

What the AER wants to do is to claw back (or refund) the return on capital earned on the difference between estimated and actual capital expenditure for the final year of AA1 when it rolls forward the asset base at the commencement of AA3. This is what is allowed under the NER, but which the Competition Tribunal recently ruled could not occur under the NGR.

The AER bases its position on arguments associated with efficiency, and in particular, the problems associated with providing gains or losses that are not associated with efficient investment. For example, the AER suggests (p1):

> *"This change is required to ensure that scheme pipeline service providers do not achieve benefits or losses due to a difference in estimated and actual final year capex used to set the opening capital base. Gains or losses which are not related to the efficiency of service providers conflict with the National Gas Objective (NGO) of the NGL because they can:*
> - *Adversely affect pipeline investment incentives;*
> - *Adversely affect pipeline usage incentives; and*
> - *lead to price distortions"*

The AER also professes itself concerned about investment incentives, suggesting that (p10):

> *"...with no adjustment, there is a risk that a service provider could become focused on revenue maximisation rather than efficiency improvement, given the very short timeframes involved. If the service provider overestimates capex in the final year it gains a return on capex that never took place. It also avoids the risk of losing the return on any capex undertaken in excess of their estimate. In the final year of an AAP service providers have a range of projects that may, or may not, begin or be completed. Given the incentives mentioned above and the information asymmetry between the regulator and the service provider, a bias towards overestimation of final year capex could emerge as a way for the service provider to maximise revenues. Adjusting for the difference between the estimated and actual capex minimises this risk and maintains a focus on efficiency improvements."*

The AER does not propose to remove the benefits or gains associated with the differences between capital expenditure forecast at the commencement of AA2 compared to the actual capital expenditure which occurs;[1] it adjusts the capital amounts in the roll-forward, but does not propose to claw back (or refund) the return on capital. It justifies this by noting (p8):

> *"The regulatory regime operates to encourage service providers to seek capex efficiencies within each AAP. Under the regulatory framework, a service provider is entitled to a return on the projected capital base for each year of an access arrangement period which is based on the opening capital base plus forecast conforming capital expenditure. While actual capex will be rolled into the opening capital base at the commencement of the next AAP, the projected capital base is not adjusted during an AAP to account for any differences between actual and forecast capex. If a service provider's actual capex is less than forecast, the service provider will retain the return on capital based on that forecast for the remainder of the AAP. Thus, there is an incentive for the service provider to spend less than the forecast."*

In a footnote to the above quoted paragraph, the AER notes:

> *"A set of examples is provided in Appendix C of this document. Example 1 of Appendix C shows how the ability to retain a return on capital on the projected capital base during an AAP creates an incentive for the service provider to pursue efficient cost savings."*

If the quotations above are read correctly, it appears that the AER is arguing that not clawing back (or refunding) the return on capital associated with the difference between actual and the *estimate* of capital expenditure made at the end of AA1 will create inefficiencies and poor investment incentives ultimately harming consumers, but that allowing service providers to keep the return on capital associated with the difference between actual and the *forecasts* of capital expenditure made at the commencement of AA2 is essential to provide the right incentives for efficient cost savings and efficient investment. It would appear that exactly the same arguments are being used to support polar opposite recommendations in respect of the Rules.

This does not appear logical. Estimated capital expenditure and forecast capital expenditure may have defined meanings (p3; although it is noted that the definitions reflect merely when the relevant spend is made), but an estimate and a forecast still both refer to the same thing; a decision made about expenditure under conditions of uncertainty. Therefore there does not appear to be any logical reason why one would make opposing recommendations in respect of each, and justify both recommendations with the same efficiency arguments.

Under the current formulation of the NGR, service providers have an incentive in respect of *both* estimates and forecasts to minimise capital expenditure. There is no logical difference between estimates and forecasts to suggest that they have opposing incentive properties, and thus no need to change the current formulation of the NGR; except perhaps to articulate this point more clearly.

The legal reason

The AER proposes the way to address the issue it perceives to exist with a very broad-brush rule change which essentially allows it to claw back (or refund) anything which it perceives to be a "benefit or penalty" associated with differences between actual and forecast/estimated capital

[1] Although, as the AEMC points out, the open drafting in the proposed Rule change may admit this possibility.

expenditure. As the AEMC has rightly pointed out, this is broader than is necessary to deal with the particular issue which the AER has highlighted.

However, this is more than just a case of loose legal drafting that a minor amendment could address. This is because it allows the AER to determine what it believes are "benefits and penalties", rather than these being specified in the Rules.

APIA notes that there is nothing in the construction of the proposed rule change which prevents the AER from determining at some stage in the future, that the return on differences between AA2 forecasts and actual expenditure represent a "benefit and penalty" that ought to be removed, or even that returns associated with investments that the AER agreed were necessary in the past but which turn out to be redundant at the commencement of AA3 once new market information comes to hand ought to be retro-actively adjusted by the same mechanism. In short, through the use of undefined terms, the proposed rule change provides the AER with unwarranted discretion.

The core of the issue is information: what is known when, when should prices be updated to reflect new information, and to what degree can new information be used retrospectively. The current status quo under the NGR, although not perfect, has been arrived at through a process of considered, public debate associated with the construction of the current regime and balancing the need for efficient pricing with the need for sufficient certainty to attract investment. Any change should therefore occur under similar considered, public debate and not through the power to effect such change being handed to the AER to use at its discretion.

The existing ability of the AER to check every investment at the estimation/forecast stage, and again before it is finally entered into the RAB, provides it with more than enough power to curb inefficient spending, and, despite the AER's concerns about the "information asymmetry" that exists between it and a service provider in terms of assessing the efficiency of capital expenditure estimates, it has not, historically, exhibited any aversion to disallowing such estimates on the grounds of inefficiency. APIA therefore sees little reason for further powers to be given to the AER in this respect; not the limited powers it claims to want in the rule change proposal and certainly not the much wider power its proposed drafting affords it.

The economic reason

A key issue in respect of infrastructure industries is the incentive for ongoing investment; something which requires a degree of stability in respect of the market and/or in respect of the activities of regulators involved in price control in that industry.

The AER considers that its proposed approach does not have any implications for incentives, suggesting that these are entirely unaffected because investors always receive back what they have spent. This is simply not the case.

Since a service provider can keep the return associated with the difference between forecast and actual capital expenditure during AA2, but has the same difference between estimates and actual capital spend from the last year of AA1 either clawed back or refunded, there is an incentive to delay capital expenditure, included in forecasts at the outset of AA1, into AA2 when making estimates for the final year of AA1 if the firm believes it has a good chance of reducing costs against forecasts. Doing so reduces the rolled-forward RAB for AA2 (at least until it is increased with the higher capital spend forecast for the first year of AA2) but, provided potential efficiency gains are sufficiently large,[2] the service provider can gain through deferral, despite this being unrelated to efficiency.

Investment timing changes are not always deliberate, and this introduces a further perverse incentive. Some utilities have relatively narrow investment windows each year, usually dependent upon the weather, which mean that actual spending can be delayed into the next year due to circumstances beyond the service provider's control. Thus, a service provider might estimate a capital spend in the final year of AA1, but not actually spend the money until AA2. In this situation, because the spending did not happen in the final year of AA1, the AER would take back all of the return on capital from that year to the present at the start of AA3. However, because the AER does not refund where actual capital spend exceeds forecast capital spend during AA2, there is no avenue for returning the clawed-back return on capital to reflect when the investment was actually made. This is not a hypothetical example, but is the situation presented to the Australian Competition Tribunal in respect of APA GasNet[3] – a case that is referenced at length by the AER in its Rule change proposal without mentioning this aspect of the review. Any investor, knowing the potential for this to occur under the AER's proposal, will not plan investment in the last year of an access arrangement which might be subject to delay for reasons it cannot control, regardless of consumer demand.

In addition to the timing issues noted above, the AER's proposal reduces the incentives to beat cost estimates during the final year of AA1 when the capital is actually spent, despite the AER's assertions to the contrary. This is inherent in the claw-back of return, which removes any benefits the firm may obtain from beating its estimates. By the same token, since any over-spend is refunded with a (compounded) return on capital, incentives to keep costs at estimated levels are weak, particularly if a service provider is able to achieve a cost of capital lower than the AER's allowed rate of return.

This does not change the incentives which already exist to beat the allocation for capital spend in the final year of AA1 made at the outset of AA1 when making estimates, because revenues in AA1 are based upon this allocation. Moreover, the allocation effectively sets an upper limit to any cost over-runs, which would result in uncompensated costs. However, this may be a weak constraint if the timing incentives above act to incentivise deferring investment into AA2.

Whether the timing incentives result in substantially skewed investment and whether cost over-runs when compared to estimates are large or small will likely depend upon the circumstances of particular service providers. However, this is arguably not the issue. What is at issue is the fact that the different treatment of forecasts and estimates leads to a distortion in investment incentives that

[2] APIA's initial, back of the envelope calculations suggest gains of 20 percent to be sufficient to make this strategy profitable.
[3] Application by APA GasNet (Operations) Pty Ltd (No 2) [2013] ACompT8, 18 September 2013

does not exist in the NGR at present, and does not appear to serve any useful purpose given the AERs considerable powers to assess capital spending both before it is estimated (or forecast) and before it is put into the RAB. For this reason, we believe the AER is attempting to solve a problem which does not exist.

The AEMC's questions

In this section, answers are provided to each of the questions posed by the AEMC, making reference, where necessary, to the arguments above.

Do stakeholders agree that the issue identified by the AER in this rule change request needs to be addressed through a rule change and, if so, why? If not, please explain why the issue, as characterised by the AER, does not need to be addressed through a rule change or may be addressed in some other way.

APIA considers that the AER has mis-characterised the issue, due to problems with both its logic and its economics, detailed above. However, we note that the Competition Tribunal appears to have once favoured and once disallowed the AER's proposed approach in respect of the return on capital associated with the difference between actual and estimated capital expenditure. To provide clarity, a rule change which makes it quite clear that neither the return on capital associated with the difference between actual and estimated (ie – the end of AA1) nor that associated with forecasts made in AA2 should be clawed back or refunded at the commencement of AA3. All that should occur is that, going forward, the RAB should reflect actual expenditure, and the rate of return should apply to that RAB on a forward looking basis.

Do you consider the proposed solution is a proportionate response to the issue identified by the AER?

APIA does not consider that the proposed rule change is appropriate, as noted above.

Do you consider the wording of the proposed rule is sufficiently clear and accurately captures the intended adjustment to the accumulated return on capital in the circumstances noted?

The proposed wording has the potential to give the AER a broader discretion than the AER states that it intends. The proposed Rule change does not state what a benefit or penalty might entail, or necessarily limit the scope of its application to benefits or penalties in respect of estimated and actual expenditure in AA1. APIA considers that these factors should be addressed, should the AEMC determine to make a rule in line with the AER's proposal.

On the basis of the issue as raised by the AER, do you consider there is a more preferable solution(s) to this issue?

Yes there is. The AEMC ought to make it clear in the Rules that the AER cannot claw back or refund the rate of return associated with differences between actual and estimated capital expenditure, but rather that the logic which drives the AER to advocate not doing so in respect to AA2 forecasts should apply equally for AA1 estimates (see discussion above).

In what way do you consider the proposed rule change may or may not affect efficiency in providing gas pipeline services and the long term interests of consumers?

As discussed above, it is likely to introduce some perverse investment incentives in respect of both the timing of investment and its efficiency once the capital spend on a project starts. These incentives operate contrary to other incentives on the service provider to only incur capital expenditure when it is needed, and to delay expenditure where it is efficient to do so.

Would implementation of the proposed rule improve consistency of regulatory processes and promote process certainty among pipeline users?

If the NER and NGR had the same words in them, then there is a superficial consistency; for all the wrong reasons (see above). However, our experience is that consumers are less concerned about which words are in what rules, and are more concerned with concrete matters such as some degree of certainty and stability in pricing. This proposed rule change has deleterious impacts in this regard, as pipeline users may be subject to unexpected increases in costs (tariffs) arising from the recovery by the service provider of the accumulated cost of capital on expenditure made in the final year of AA1 , from the start of AA3.

How would the rule as proposed impact upon service provider efficiency incentives that underpin the regulatory regime?

As discussed in the main text, the proposed rule change creates perverse investment incentives to incur costs in the final year of AA1 higher than the approved estimate.

Is the proposed approach likely to improve and/or promote administrative efficiency and minimise undue regulatory burden?

No; it is likely that consumers facing a new charge for energy they have already consumed, based on problems with cost estimates that are six years old will consider their regulatory burden has increased significantly.

Would the proposed rule impose any material costs on consumers or service providers? Please estimate, describe and characterise any costs and their impacts.

Yes; it would introduce volatility for all concerned which does not exist at present. It would also impose conflicting incentives on the service provider that are not consistent with efficiency. See discussion above.

APIA welcomes the opportunity to discuss any of the points raised in this submission with the Commission. Please contact me on (02) 6273 0577 or sdavies@apia.asn.au for further information.

Yours sincerely

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