

Pipeline Information Disclosure Issues Paper

Chapter 4 – Asset Values

The AER asks for our views on the requirement to publish both a recovered capital methodology (RCM) asset valuation and a depreciated book value method (and whether we should be required to reconcile the two), or whether some other alternative should be used. Alongside this, the AER asks what additional information should be published to help users interpret and understand asset values.

We approach this task from the perspective the AER suggests, p11 that the process should:

..... enable users to estimate a reasonable cost-based tariff using information on the revenue, operating costs, capital expenditure, depreciation, and asset valuation.

We believe this is a very useful starting point; the AER should ask about each aspect of the Guidelines what a customer actually needs to form a reasonable cost-based tariff estimate, and focus on requiring that information, rather than more information and more justification of that information.

In respect of asset valuation, three things flow from this:

- Having several different ways of determining an asset value, particularly ways that are fundamentally incompatible, does little to assist customers discover “reasonable” cost-based tariffs. The matter is not helped by requiring pipelines to somehow “reconcile” these incompatible methods; all this does is show customers that the answer you get depends entirely on the approach that you choose.
- The RCM is simply unable, in conception and in practice, to give a “reasonable” estimate of cost-based tariffs as it is little more than a summary of past profitability which is used nowhere but by (some) Australian regulators, and thus of little relevance to customers who do not have a detailed understanding of regulatory practice.
- Rather than assuming that the problem customers have in forming reasonable cost-based tariffs is due to pipelines somehow withholding information and that the solution therefore lies in compelling more information be released, the AER should stop and consider what information is most useful to customers.

Our suggested solution to these three issues is that pipelines be allowed to use one of four different options, obviating the need to undertake reconciliations which will be of little utility. This greatly reduces the information burden for customers. The four different options, in order of preference, are:

- Using a RAB, determined by a regulator, where one has been determined at some point in the past decade or so, and then update that RAB following the same kind of roll-forward process that is followed for scheme pipelines.¹
- Developing a depreciated optimised replacement cost (DORC) for the relevant asset in, say, April 2023, similar to those developed for regulated assets when regulation commenced,

¹ In the AER's 2017 Financial Reporting Guideline for Non-Scheme Pipelines, p18-20, available [here](#), p21, the AER states that “If a pipeline was previously regulated and a determination made on the asset value, the service provider may use this as the opening balance for the calculation under this method from the date the determination was made and to roll it forward using the method set out in the Guideline”. It is unclear, then, whether the RCM is intended to include the use of a regulatory RAB. If it is, then the AER should make this clear in the Guidelines. Additionally, if a regulatory RAB can be used, then the regulatory approach to rolling forward the asset (the 2017 document is not clear on what the method for rolling forward the asset is; unless the AER means that the RCM should be used in the quote above) should also be allowed, just as it is for scheme pipelines.

having this independently verified, and then rolling that asset value forward from this date using the same kind of roll-forward process used for scheme pipelines.

- Using the acquisition cost for an asset, at the time it was purchased, and the rolling it forward in the same kind of process as is used for scheme pipelines.
- Using the RCM for a one-time asset valuation, say at April 2023, and then rolling the same asset forward using the roll-forward mechanism used for scheme pipelines from that date.

In all cases, the relevant approach is used to set an asset value just once, and from that point forward, the asset value is rolled forward using standard regulatory approaches. This means that customers can rely upon well-developed AER approaches to rolling forward asset values. This approach has been used for former light regulation pipelines (AGIG's AGN Brisbane network) and some Part 23 pipelines (AGIG's AGN Wagga Wagga network) that were formerly full regulation pipelines, where the standard regulatory roll-forward mechanism has been used to determine tariffs since full regulation was revoked. Note that these assets also used a former regulatory RAB approved by the AER to establish the starting RAB.

This is enhanced by not requiring asset valuation methods to be repeated year-on-year. When scheme pipelines (and electricity networks) started to be regulated roughly 25 years ago, the original proposal was that the asset values would be updated at every new Access Arrangement. It was quickly realised that this was a highly contentious, risky process that added little benefit to consumers.

The difference between the second and third approaches above to forming an initial asset valuation is, in our view, slight. Using acquisition costs as the basis means that customers will pay whatever premium was inherent in the purchase price which is not paid by customers of regulated networks. A DORC methodology, by contrast, can be costly and contentious. We think it appropriate for the AER to give pipelines a choice between these two approaches, given individual circumstances. Some flexibility within the approaches would also be appropriate; for example, an acquisition cost which separately identifies and therefore allows customers to remove any goodwill premium may be sufficiently close to either a DORC or a regulatory RAB value as makes little difference.

Our key concern is to ensure that the RCM is used only as a last resort methodology, to be used where no other approach is feasible. The reasons for this are discussed further below.

Issues with the RCM

Our concerns with the RCM are two-fold:

- Conceptually, it does not meet the goal of the NGR (NGR113Z(5)), and is likely to be deleterious to customers, particularly those served by a network which has had poor returns in decades past.
- Practically, it would be impossible to implement for any network which is more than a few decades old. This is partly an issue of appropriate records in a network of its capex decades past, and partly an issue of working out a suitable rate of return on capital for use with historical data; the AER's preferred approach of using the 2023 RoRI has a very limited application.

Turning first to the conceptual issue. The AER notes that (p 18), the requirement under the NGR that asset values for non-scheme pipelines be calculated in accordance with NGR 113Z(5), which effectively adopts the RCM (113Z(5)(b)) except where it is inconsistent with the objective of:

...facilitating access to pipeline services provided by means of non-scheme pipelines on reasonable terms, which is taken to mean at prices and on other terms and conditions that, so far as practicable, reflect the outcomes of a workably competitive market. (NGR113Z(5)(a)).

If this is the case, the RCM should never be adopted, because, by design, it operates in exactly the opposite way from a workably competitive market; except in the rare instance where actual returns match predicted returns exactly. The way the RCM works is to use depreciation as the “washup” for all costs including the required return on capital. This means in practice that, for a pipeline whose earnings exceed its required return on capital, depreciation increases and, where a pipeline does not earn its required return on capital, depreciation decreases and can even be negative, leading to an increasing asset value for loss making pipelines.

This is the exact opposite of how a workably competitive marketplace works. In a workably competitive market, an asset which is more successful than was originally envisaged by its investors rises in value and could be sold for a higher price, whilst an asset which fails to meet its investors’ original expectations will fall in value and be sold for a lower price. For example, if predicted demand fails to materialise in a workably competitive market, the asset serving that market declines in value and may, in extreme cases, be written off. The RCM raises the value of that asset.

It is also far from clear whether the RCM serves customer interests. A customer fortunate enough to be in an area where past demand exceeded expectations may well think it eminently reasonable that the prices they face now are lower, and that they have essentially captured all of the upside risk present at the time of the investment. However, a customer in an area where demand has failed to materialise is unlikely to find it reasonable that they must now pay for historical forecasting mistakes made, potentially, decades ago; most particularly since the RCM, by design, forces her to pay for these mistakes with interest.

This has important consequences for upstream and downstream efficiency. Consider two towns which are identical in every way in respect of their forward-looking characteristics, save that one is served by a network where demand grew more quickly in the past than anticipated and one grew more slowly. If gas network charges are based on an RCM asset valuation, then a downstream factory investor would choose the former town, because gas distribution charges would be lower; indeed the latter town would need to find some other competitive advantage to overcome the legacy issues imposed on it entirely by the use of the RCM. In this instance, sunk costs, in the form of the network, determine economic choices, the exact opposite of what sound economic theory says should happen.

The RCM also has considerable practical implementation issues, associated firstly with the records on capex from the past, and secondly, due to concerns with estimating the cost of capital in the past.

To illustrate this, we use our Brisbane network, which will be subject to the Guidelines the issues paper deals with.

The RCM requires that a network start with the initial construction costs, and trace historical capex from that date.² Our Brisbane network started life in 1865 (see [here](#), [here](#), [here](#) and [here](#) for some of the history of gas networks in Brisbane, starting with the town gas networks). This is when capex first began. It is true that many of the assets originally built are no longer in use, but this does not

² See the AER’s 2017 Financial Reporting Guideline for Non-Scheme Pipelines, p18-20, available [here](#). Note that the AER is quite specific about the use of historical construction costs and not acquisition costs on p19 where it says “...For clarity, if a service provider does not build pipeline assets but acquires them, they are not able to use the acquisition cost of the asset but must use historical construction cost”.

matter; if an individual asset (say a valve, or a city-gate station) is in use during a time when the network has low (high) profitability then the unrecovered (extra-recovery) would be added to (subtracted from) its replacement asset so that the investor is made whole. This is how the RCM works by design.

It would simply be impossible for us to go right back to 1865 and apply the RCM from that date going forward. We do not have the records of every piece of capex going back 150 years to hand, and uncovering this information would require a substantial amount of work. There could be no guarantee all capex was captured, and we can see little advantage to customers of this very costly process of historical investigation.

It might be possible to use the RCM only for the assets currently in service, starting with the earliest of these rather than at 1865. However, this does not help much, in a practical sense, as some of these will have been in service for around 60 years or more, and data, whilst easier to come by than for 1865, is still a challenge.

Even if we did have accurate data on construction costs and capex going back to 1865, forming a required return of capital estimate over this long time-frame is unlikely to be feasible.

Conceptually, we do not believe that it is appropriate to use the 2023 RoRI or its methods for time periods when the AER or ACCC have made determinations as to the required return of capital in the market; for example, the 2018 RORI, the 2013 Guideline, the 2009 WACC Review and earlier regulatory determinations. At each point in time, the AER or ACCC has made it clear that its approach to the estimation of the required return on capital was correct, and to supplant past determinations and use the 2023 RoRI would suggest that the AER and ACCC were incorrect in the past. This does not seem appropriate, particularly when the 2023 RoRI was developed using information not available to the AER (or anyone else) in prior years.

Beyond this conceptual issue is a practical one; even if we were to use AER and ACCC decisions as a guide (with, as the Issues Paper, p20, points out, the caveat that the number for beta may change given different systematic risk exposure), these only go back to roughly 2000. If we adopt the 2023 RoRI methodology prior to that date as a fall-back, we are left with a problem of data availability, which gets worse the further back we go in time. For example:

- The AER's approach to estimating MRP relies upon an historical average back to 1988. This has changed from earlier AER approaches, but even if we were to use it, it would be highly inaccurate prior to about 2000 as the sample size would be too small. We would need to adopt a different methodology prior to 1988 and, although data do exist (and have been used by the AER in the past) they do not go back to 1865. Note that simply using 6.2 percent (Issues Paper p20) is not an appropriate solution, as it is an estimate based on current data and one which has changed from even the 2018 RoRI despite the methodology remaining almost identical.
- Beta estimates are more challenging. The 2023 RoRI is not very clear on how we might choose different companies based on systematic risk differences; indeed it specifically stated that gas and electricity businesses have the same systematic risk. There is no method we can follow to choose firms in the RoRI. Moreover, the AER's method is not mechanistic, and it is far from clear what the AER would have chosen for a different set of firms. Finally, further back in time, the availability of data becomes an issue; few of the firms the AER currently uses existed prior to 2000 and only AGL goes back to 1865.

- The AER's RoRI approach to gearing uses the market value of equity. If, as the issue paper suggests, we are to use the actual gearing of the relevant asset (in reality we can only go to the level of the company which owns it, as assets do not have traded equity), then there is a narrow window during Envestra's days as a private company which we can use; otherwise there is no reliable data, either historically or going forward.³ This has impacts both for the determination of beta (which the AER suggests should reflect actual gearing) and the WACC itself (which is likewise to be actual gearing).
- Whilst there is RBA data on the ten-year government bond, the AER's current proxy for the risk free rate back to 1969, prior to 1983 and the economic reforms around the floating of the Australian dollar, interest rates were set by government to maintain an exchange rate. It is not clear whether this reflects market expectations of the risk-free rate.
- The debt indices the AER uses to determine its cost of debt go back to 2005. Prior to that, the ACCC used the CBA Spectrum data series, but it is not clear whether this data series extends back beyond 2000.⁴ It is not clear how we determine the appropriate cost of debt prior to this date.
- Gamma is an estimate, based upon data up to a certain date. It is different now, for example, compared to even the 2018 RoRI. Thus earlier or subsequent gamma estimates would necessarily change. Moreover, the underlying ABS data that the AER uses go back to YEAR, which further limits backward calculation of gamma.

The guidelines might make clear that we use an extant AER or ACCC decision as a basis where these exist, and that the method of the 2023 RoRI be used prior to this. However, this does not solve the issue that the 2023 RoRI is not always clear on what the AER would have done with different data, nor the more salient issue that the data which it uses simply do not exist historically. If we are to implement the RCM we would, by necessity, be in a position of non-compliance with a guideline which requires us to follow the 2023 RoRI.

As a final point, we do agree that pipelines ought to use the CAPM to determine required rates of return.

Other points

Depreciation

In respect of depreciation reporting (p13), we would urge the AER not to take a prescriptive approach. The issue of the future uncertainty of the energy sector is a crucial, but newly emerging issue. Whilst the AER has released an information paper on this ([here](#)) and pipelines have started to develop approaches (APA [here](#), and AGIG [here](#), for example), and whilst the AER has suggested that accelerated depreciation appears a suitable response it has neither:

- made a clear determination that accelerated determination is the only appropriate way to deal with the relevant risks; nor
- developed a single method which it believes best implements an accelerated depreciation approach.

³ We may use Boral's data, but Boral had a wide variety of activities, many of which were very removed from gas transportation (see [here](#)), and in any event, this takes us back only as far as the Boral takeover of Brisbane Gas Networks in 1971. We understand there were private players in Brisbane before this date, but data collection would be a major exercise. It is difficult to see how we are serving the interests of our customers by trawling through ancient company records in a Brisbane library for the annual reports of long-dead companies.

⁴ We are aware of data going back to 2000, but not older data. We note that the ACCC only started using the CBA Spectrum data in 2002 and, prior to that used the views of banks as to an appropriate debt margin.

This is to be expected given the novelty of the issue and indeed a clearly defined procedure at this early stage would very likely turn out to be wrong. For this reason, the guidelines proposed in the issues paper should not run ahead of the “state of the art” surrounding this issue for scheme pipelines. The guidelines should allow accelerated depreciation as a tool for dealing with future risk (though not exclusively) and should require pipelines to explain what they have done, but it should not be prescriptive in respect of what ought to be done.

We do not have an issue with the AER’s suggestion of annual depreciation (and similarly, annual capex Issues paper pp13 and 23 respectively) reporting for scheme pipelines, except to note that the five-yearly AA cycle for scheme pipelines may alter results somewhat as the AER assesses efficient spending. This, however, is unlikely to make much difference for the indicative prices consumers might calculate to inform themselves. We question the use of weighted average lives, rather than year-by-year tracking, and suggest that an approach similar to the PTRM, where assets in a given class of different vintages contribute to the remaining life in that class would be most appropriate.

Costs of planned extensions and expansions

We can appreciate the rationale behind the suggestion that pipelines report the cost of planned capacity expansions, as this assists customers in understanding, where pipelines are close to capacity, what the next tranche of capacity might cost. However, we question the utility of very detailed information, except in cases where a pipeline is nearing capacity and the pipeline owner already plans to expand the pipeline.

FEED studies, to determine the cost of expansion in detail, are expensive, and would need to be paid for by someone. Moreover, they are highly time-dependant and quickly become stale. Keeping a constantly updated FEED study for the next X GJ of capacity for a given pipeline would rapidly become a very expensive exercise, and would be largely useless unless the pipeline was near capacity.

Moreover, in cases where a pipeline is already planning to expand, and has done a FEED study, although providing early information to customers about likely costs may seem a useful option, the AER needs to be cognizant of issues of commercial confidentiality associated with the detail in the cost forecasts. If, for example, a pipeline has put an expansion project out to tender, publishing information based on the tender proposals is likely to impact the commercial confidentiality of the construction companies, and influence the prices they are willing to bid for work.⁵ Indeed, it is not difficult to imagine a disclosure regime instituted by regulators which raises the price of pipeline construction, because of the information it forces construction companies to reveal.

Finally, the AER needs to consider the purpose of requiring this information, which is to assist customers understand how prices might evolve. For a relatively small customer, since capex costs are smeared across all customers (at a point in time, and through time; we recover our capex over the life of assets), even if capacity expansion is planned, it probably will not change bills by very much. For a larger customer, who might increase demand over the current capacity on its own, we would commonly negotiate with that customer individually and come to an arrangement in respect of that capital expenditure and its costs. In many cases, where the capacity upgrade is required solely for that customer and would not otherwise be needed, that customer would pay for it.

⁵ Potentially not only in the pipeline sector. For example, if the capex reporting requirements are detailed enough to capture labour costs, the competitors of a given construction company may be able to ascertain what that company pays its workers, which has knock-on effects in other sectors where the firm builds things.

Customers large enough to enter into these kinds of negotiations are also large enough to make themselves informed about construction costs, and would gain little from regulatory reports.

For these reasons, we would suggest that the most prudent option, in respect of required reporting is something much simpler, like an index of pipelines construction costs, so that customers can see, roughly what it would cost to expand some examples of likely or at least feasible expansions for the pipeline concerned.⁶ More detailed information is unlikely to be of any use to customers (certainly not so useful that customers would be willing to pay for a FEED study to be updated annually for a pipeline not planning expansion) unless expansion is planned over some relatively short timeframe, say 3 years :

- The spare capacity on the pipeline be published, where doing so would not have commercial confidentiality concerns, and where and how the information is meaningful. For example, distribution networks are spread out and capacity constraints tend to happen in an area rather than across the network as a whole. Since every pipeline and network will differ in this respect, the AER should not be overly prescriptive.
- Where major capital works are planned, such as replacement of mains, then this should also be published.
- That pipelines publish a rough index of the current costs of pipeline capital expansion costs, which can be updated annually year-on-year relatively inexpensively; something like a pipeline-centred version of what Rawlinsons [publishes](#) for general construction costs.

Cost allocation

The AER suggests (p15) what could become some quite prescriptive cost allocation principles, particularly if they are detailed enough for the AER to replicate “outcomes”. We would suggest that considerable flexibility is necessary here. Most of the companies operating non-scheme pipelines not only also operate scheme pipelines, but also operate other energy and non-energy assets entirely outside the purview of the AER.⁷

Providing a detailed allocation of costs such as head-office costs, across this extremely complicated map of our operations in a way which is unlikely to assist customers determine a reasonable price. This is most especially the case where there is no “efficient” way of allocating fixed costs, and because customers of a gas distribution network in Darwin arguably have no business knowing how much of the operating business’ fixed costs are allocated to a wastewater treatment plant in Tasmania and still less whether some of their competitors have managed to negotiate a particular level of fixed cost allocation for a power station in Papua New Guinea. This is certainly not the kind of information they would expect to obtain from a supplier in a competitive marketplace, and extends the AER’s information gathering well beyond the remit of its governing legislation.

A particular concern is the AER’s suggestion that sufficient detail is provided to enable the AER to replicate “reported outcomes”. What does the AER mean by this? APA is a publicly-listed company and thus its overall financial information is publicly-available.⁸ Does the AER mean that it wants to be able to start with APA’s reported public accounts, follow through fixed costs allocated to

⁶ We note that Rawlinsons publishes an annual guide for process engineering, which covers the oil and gas sector (see [here](#) and [here](#) for more general construction costs) This gives probably the right level of detail for construction on a per inch-km basis, and networks might take this number, assuming an arrangement can be reached with Rawlinsons for its IP and turn it into something relevant for the diameter and length of pipeline expansions likely for a given pipeline over some time-horizon.

⁷ See, for example, [this](#) for APA.

⁸ We are not, unless the AER proposes to collect financial reports for our parent company from the Hong Kong stock exchange, and do this exercise on a global basis. If the AER has a different idea about where it plans to start this replication process than public accounts, then it should indicate what this is.

businesses completely outside the gas pipeline business, then to gas businesses, then to individual assets? We would submit that, not only is this likely to prove impossible but:

- publishing enough information to allow the AER to do this would likely violate dozens of confidentiality agreements APA has with different parties for projects in sectors over which the AER has no governance, and would otherwise have no rights to information at all; and
- it is difficult to understand how such detailed forensic accounting assists a consumer to work out a “reasonable” price; the extra precision gained, even if the AER could do this task, would likely sit well within the error bands of all of the other building blocks.

We would suggest that, rather than a detailed and prescriptive one-size-fits-all set of principles, the AER merely require that cost allocation mechanisms in the business generally meet relevant accounting standards, with some degree of independent sign-off (part of the process described by the AER on pp29-30 of the issues paper) of the allocation within gas pipelines. Anything more detailed than this is unlikely to produce any benefits for customers seeking to form a reasonable estimate of cost-based tariffs, at considerable cost to pipelines.

Tax

The AER suggests some very prescriptive requirements (p23) for tax, suggesting that we publish actual taxes paid, and publish details associated with the allocation of tax across pipelines. We struggle to understand how this level of detail is consistent with giving customers a reasonable ability to replicate prices.

Every operator of non-scheme pipelines will have highly complicated tax structures influenced by the whole range of assets they operate. None, to our knowledge, tie tax payments to particular assets, but rather do so to the overall governing company concerned. Unravelling these tax structures is the purview of experts, and is not easily explained to customers. Additionally:

- Particular tax structures reflect particular historical facts, and, like the RCM, may have beneficial or adverse effects on customers which are completely unrelated to “reasonable” tariffs.
- Tax is a time series, not a snapshot; over time everyone pays the corporate rate of tax even if they deviate from it at a point in time due to, for example, prior tax losses. Thus, to provide an “actual” tax picture, we would need to provide not only the current picture, but a projection of actual tax right through to the end of the lives of the assets concerned.

None of this seems appropriate to a goal of giving customers a “reasonable” ability to determine cost-based tariffs, but rather seems more likely to swamp customers with irrelevant information.

An issue similar to the tax issue in the issues paper arose in the AER’s profitability and benchmarking reporting, where it quickly became apparent that reflecting anything like the “actual tax paid” by a complex business for the relevant regulated services was impossible. We would encourage the AER to look to the solutions found in this process to simplify the treatment of tax for this reporting requirement, and meet the goal of providing information to customers which can allow them to reasonably calculate a price.

Decommissioning costs

In respect of decommissioning costs, the AER notes (p21-22) that these have not historically been included, and suggests a number of approaches to deal with them. We believe these costs should be considered. This is most particularly the case where accelerated depreciation is proposed, because

this is proposed precisely to deal with the risk that the asset may become at least particularly stranded in future; a situation where decommissioning may become relevant. More broadly, however, if a network is decommissioned at some stage in the future, then at some point in time, customers will need to pay. Even if it is not charged to current consumers, including it in the guidelines at least informs customers of a cost which they are currently avoiding, which is itself useful information.

At this early stage, particularly if the costs are not being charged to consumers, precise estimation of decommissioning costs is probably less relevant than it might become in the future if and when such costs are charged. This is particularly the case where policymakers may decide that costs can be lowered for customers in the long run by government picking up some decommissioning costs and thus reducing risk.

As a final point, although we disagree that the RCM should play any role other than as a last resort, we do not think that decommissioning costs are inconsistent with the RCM. The fact that including them in the past has led to negative residual values (issues paper p21) is more indicative of the flaws in the RCM approach than a problem with decommissioning costs per se, and that there is a better solution than ignoring said costs.

There is, however, a simple solution. We suspect that the historical construction costs, particularly for a pipeline constructed many decades ago, did not include a provision for decommissioning. By construction, where this is the case, if decommissioning costs are now subtracted as in the RCM formula, eventually the asset value will become negative. The only time this will not occur is if the pipeline loses money, and thus depreciation is negative; so one flaw in the method appears to offset another. The simple solution is to allow as capex the decommissioning costs which were not originally included in the construction costs of the relevant pipeline.⁹ Although removing the RCM altogether would be better, this solution is at least a way of fixing one of its flaws, and is much better than ignoring decommissioning costs, which are relevant information for customers.

⁹ Said costs can be updated by changing capex in future, as required, and could include both positive and negative adjustments.