Rate of Return Guidelines – Consultation Paper

Submission from

Jemena Limited to the

Australian Energy Regulator

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1 Executive summary

Jemena Limited **(Jemena)** welcomes the opportunity to respond to the Australian Energy Regulator's (**AER**'s) consultation paper on the rate of return guidelines (the **guidelines**).

Jemena endorses the ENA's submission

The Energy Networks Association's **(ENA**'s) submission is robust, with well-considered analysis of the questions and positions raised in the consultation paper.

This submission is supported by a large body of expert material commissioned by the ENA, and prepared by a range of academics and consultants, to help inform all stakeholders.

Jemena strongly supports the hybrid cost of debt benchmark

Jemena has particularly strong views on what benchmark the AER should use to set the cost of debt – and this is the focus of our submission. Our submission responds to questions 6.1, 6.2, G.1 and G.2 of the AER consultation paper.[1]

The AER currently favours a trailing average benchmark,[2] but this has some material negative consequences for smaller network service providers (**NSPs**) like Jemena (and their customers):

- NSPs like JEN and JGN with smaller debt portfolios are unable to issue debt evenly over the trailing average period (or use swaps to mimic this) – as is assumed by the benchmark – without facing extra financing costs and risks
- NSPs like JEN and JGN with lumpy debt, which is more common among smaller NSPs, will struggle to transition their debt portfolios to mimic the trailing average benchmark – and any transition to this benchmark will further increase financing costs and risks for these NSPs
- NSPs like JEN and JGN that are unable to mimic the trailing average benchmark effectively may have to adopt debt management practices that differ from those assumed for this benchmark – and so the incentives that these NSPs face may differ materially from the benchmark efficient NSP with unintended consequences, such as taking on extra exposure to interest rates in a way that undermines efficient investment in network assets.

Section 6.1 and appendix A discuss these consequences further. If the AER were to adopt the trailing average benchmark, then these extra costs and risks should be compensated through higher cost of debt or equity allowances, or both – for

[1] AER, *Rate of return guidelines – consultation paper*, 10 May 2013.

[2] *Ibid*, p. 111.

instance, through a higher equity beta or lower credit rating. Otherwise, the affected NSPs will not have a reasonable opportunity to recover at least their efficient cost of funding (see section 3).

But this compensation can be ignored if the hybrid cost of debt benchmark were used – and this is why we favour it. As discussed below, this benchmark represents a regulatory bargain between consumers and NSPs to lower financing costs (and therefore tariffs) in the long-term.

The hybrid approach reflects the current practice of many private NSPs

The hybrid benchmark starts with the assumption that the benchmark efficient NSP issues fixed rate debt over time, much like the trailing average benchmark. This debt is first swapped (using interest rate swaps) into floating rate debt of the same term (e.g. 10 years) and then just before the start of the regulatory period swapped (again using interest rate swaps) into fixed rate debt for the term of that period (e.g. five years).

This practice of using swaps is similar to that used by many private NSPs to implement the current (rate on the day) benchmark, including Jemena (see appendix A). The rationale behind the two swap transactions is that the base rate component of the debt (e.g. the bank bill swap rate) is fixed for the duration of the regulatory period for all new and existing debt. This removes the refinancing risk on debt issued within the period and lowers the base rate on all debt (new and existing) in the long-term, provided that:

- the term of that debt is greater than the length of the regulatory period – which is true for all AER decisions to date, and
- the yield curve for interest rate swaps is upward sloping in the long-term – which is the case currently and is consistent with theory (see section 6.2.1).

Transaction costs are incurred from both swap transactions (see section **Error! Reference source not found.**), but these are more than offset by the lower base rate – which leads to a lower cost of debt benchmark in the long-term (by about 25 to 28 basis points) than under either the trailing average or current (rate on the day) benchmarks (see section 6.2.1).

Section 5 discusses the hybrid benchmark further, including how the AER could implement this without annually updating tariffs or implementing a transition mechanism from the current (rate on the day) approach – which helps limit the complexity of this benchmark. Even if the AER did use such a mechanism, this could be implemented as a true up at the end of each regulatory period rather than as an annual update.

The hybrid approach represents a 'regulatory bargain' that can benefit both customers and NSPs

The efficient debt management practices of a benchmark efficient NSP are influenced by the cost of debt benchmark it faces. Recognising this, the AER has the opportunity to set this benchmark in a way that reduces the debt financing risks and costs of NSPs – and this is the case for the hybrid approach for smaller NSPs like Jemena.

The 'bargain' comes from using the regulatory framework to reduce long-term financing costs to the benefit of both customers (as lower tariffs) and NSPs (as lower debt financing risks and costs). This bargain may not work in all cases (e.g. for larger NSPs that cannot effectively use swap markets), but it does for Jemena.

Some may argue that the regulatory framework should seek to replicate a competitive market. But this is not actually required by the National Gas Rules (**NGR**) or Law (**NGL**), or the National Electricity Rules (**NER**) or Law (**NEL**) (see section 3). Instead these rules and laws seek to establish incentives for NSPs and set tariffs in a way that promotes the long-term interests of consumers – as embodied in the National Gas Objective (**NGO**) and National Electricity Objective (**NEO**).

Thinking about the regulatory framework in this way is not new. In fact, the current approach used to set the regulatory asset base (**RAB**) is also a regulatory bargain where NSPs are protected from random shocks to the value of its assets. This protection materially reduces risks to NSPs, which is passed on to consumers in the form of more stable (and lower) tariffs over time.

Importantly, other regulators – such as the Queensland Competition Authority (**QCA**) and the New Zealand Commerce Commission (**NZCC**) – have set the cost of debt using swaps, similar to the hybrid benchmark (see section 6.4). These regulators have highlighted the benefit to consumers of reducing the financing costs and risks of NSPs by aligning the base rate (using swaps) with the length of the regulatory period.

Section 3 discusses this bargain further.

Customers and other stakeholders should get the opportunity to consider this bargain by having the guideline detail all three cost of debt benchmarks

This opportunity exists during both the current guideline consultation and individual price reviews of NSPs. But to ensure effective consideration, our view is that the guidelines should set out how the AER would apply each of the three cost of debt benchmarks – even if the AER prefers only one and states this in the guidelines.

Two key benefits of this are:

- *Clearer guidance for individual price reviews* – the NGR and NER expressly let NSPs propose any of the three benchmarks during their price reviews (see section 4.1.1). NSPs would benefit from having guidance from the AER on how it would apply each benchmark as this would help in the preparation of cost of debt proposals. This is particularly relevant as NSPs assess the guidelines against changes in market conditions and operating environments when implementing their debt management practices.
- *Improved stakeholder participation* – some stakeholders, particularly consumer groups, are more actively engaged during industry-wide consultations (such as the current guidelines development) than at individual price reviews. If an NSP proposes during its price review an alternative benchmark to that preferred by the AER, then some stakeholders are unlikely to provide input. The AER would benefit from having this input provided during the current consultation.

Furthermore, when drafting the new cost of capital rules, the Australian Energy market Commission (**AEMC**) recognised that there are a number of efficient debt management strategies or practices – and that it was not possible to set one approach that would be efficient in all circumstances.[3]

Given that the AER is already considering all three benchmarks during this consultation, the incremental cost to the AER of detailing in the guidelines how it would apply each is minimal. But the benefit to all stakeholders of understanding the AER's position is significant.

Section 4 discusses the role of the guidelines further.

[3] AEMC, 29 November 2012, *Economic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services, Final Position Paper, p. 72.*

2 Introduction

2.1 Context of the guidelines

The November 2012 AEMC rule changes on network regulation[4] require that the AER establishes a number of guidelines to assist investor, service provider and consumer confidence in the framework. In particular, the guidelines were introduced to ensure that the regulator is transparent about its approach, and consults extensively when determining the allowed rate of return.

The AER rate of return issues paper published in December 2012 was the first consultation in its 'Better Regulation' program. Jemena responded to that issues paper on 15 February 2013. Following a further round of consultations, the AER published its rate of return consultation paper on 10 May 2013. This submission is in response to that consultation paper.

2.2 Jemena's network businesses

Jemena owns two network businesses: Jemena Gas Networks (NSW) Limited (**JGN**) and Jemena Electricity Networks (Vic) Limited (**JEN**).

JGN is a covered pipeline service provider, within the meaning of the NGR, that serves 1,100,000 consumers in Sydney, Newcastle, Central Coast and Wollongong and over 20 regional centres across NSW.

JEN is an electricity distribution network service provider (**DNSP**) that serves 320,000 consumers in north western Melbourne.

Jemena also has ownership interests in the United Energy (**UED**) electricity distribution business in Victoria (34%) and the ActewAGL gas and electricity distribution partnership in the Australian Capital Territory (50%). Jemena also owns the Eastern Gas Pipeline, Queensland Gas Pipeline, VicHub pipeline and the Colongra Gas Transmission and Storage Facility.

2.3 Jemena's regulated debt portfolio

2.3.1 Assumed regulatory asset base

Jemena has an assumed RAB of about $3.8 billion ($nominal), made up of:

[4] AEMC, *Rule Determination, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012*, 29 November 2012.

- $2.7 billion ($nominal) for JGN[5]
- $965 million ($nominal) for JEN, excluding its advanced metering infrastructure (**AMI**),[6] and
- $148 million ($nominal) for JEN's metering assets.[7]

Assuming 60 per cent leverage, this implies a regulated debt portfolio for Jemena of $2.3 billion ($nominal), or $1.6 billion ($nominal) for JGN and $668 million ($nominal) for JEN (including metering). Importantly, the assumed debt portfolios for JGN and JEN are treated separately under the gas and electricity regulatory regimes.

2.3.2 Actual debt portfolio

Jemena centralises its debt management across all of its operations – which means that JGN and JEN do not issue debt directly. All externally sourced debt is incurred by either Jemena or its parent company SPI (Australia) Assets Pty Ltd (**SPIAA**). As at 31 March 2013, SPIAA had $1.3 billion ($nominal) in outstanding bank loans and $2.4 billion ($nominal) in outstanding debt securities.[8] SPIAA has a Standard and Poor's credit rating of BBB+.

SPIAA and Jemena issue a mix of floating bank loans, domestic fixed bonds, domestic floating bonds and foreign currency bonds. Much of this debt is used to finance Jemena's activities, including JGN and JEN.

As set out in appendix A, Jemena's debt policy (and that of SPIAA) is to minimise the exposure to changes in interest rates by matching the actual cost of debt with

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[5] This value is calculated by taking the most recent AER approved RAB value as at 30 June 2013 and inflating this to $nominal using actual inflation data sourced from the Australian Bureau of Statistics (**ABS**): all groups CPI inflation series A2325846C, weighted average for the eight capital cities for the December quarter.

See: AER, *Access Arrangement Information further amended by order of the Australian Competition Tribunal for mine subsidence*, September 2011, Table 6-8 pp. 16.

[6] This value is calculated by taking the most recent AER forecast RAB value as at 31 December 2013 and inflating this to $Nominal using actual inflation using actual inflation data sourced from the ABS: all groups CPI inflation series A2325846C, weighted average for the eight capital cities for the September quarter.

See: AER, *Pursuant to Orders of the Australian Competition Tribunal in Application by United Energy Distribution Pty Limited (No 2)* [2012] ACompT 8, Sep 2012, pp. 28.

[7] This value is calculated consistently with AER's final decisions for both JGN and JEN.

For instance, see: AER, *Jemena Electricity Networks (Victoria) Limited Distribution Determination 2011-15*, October 2010, Table 14, pp. 26, and

AER, *Access Arrangement Information further amended by order of the Australian Competition Tribunal for mine subsidence*, September 2011, Table 7-1, p. 19.

[8] SPIAA, *2013 Financial Statements*, p. 48.

This and other financial information is available at: http://jemena.com.au/about/investor-information.aspx.

the cost of debt assumed by the AER when setting the rate of return for its regulated businesses.

2.4 Structure of Jemena's submission

This submission sets out Jemena's response to issues raised by the AER in the consultation paper, and consultation questions 6.1, 6.2, G.1 and G.2 specifically.

The remainder of this submission is set out as follows:

- Section 3 explains that the NGO and NEO focus on the long-term interests of consumers, which could be satisfied through a regulatory bargain between consumers and NSPs
- Section 4 argues that the guidelines should set out how the AER would apply all three cost of debt benchmarks
- Section 5 explains how each cost of debt benchmark works, including the transactions involved to hedge
- Section 6 shows that the hybrid cost of debt benchmark benefits consumers in terms of a lower long term cost of debt and lower volatility than the rate on the day benchmark
- Appendix A provides a detailed explanation of Jemena's current efficient debt management practices
- Appendix B analyses the volatility of the three cost of debt benchmarks, and
- Appendix C attaches a memo by Jemena, SP AusNet, Citipower / Powercor, and SP Power Networks on future hedging transaction costs.

This submission is complementary to and should be read in conjunction with that of the ENA – which Jemena endorses.

3 Objectives for the cost of debt benchmark

Key points:

- The long-term interests of consumers are key when setting the cost of debt benchmark as is encouraging efficient financing behaviour – as required by the NGO and NEO.
- Competitive markets offer a useful starting point when determining what this behaviour should be, but the AER has the opportunity to encourage alternative behaviour that better promotes the long-term interests of consumers.
- This may not work for all NSPs (i.e. because they are unable to replicate this behaviour). However, if it does, then both consumers and NSPs can benefit from a 'regulatory bargain' where regulatory design is used to lower debt financing costs and risks to NSPs and to share these benefits with consumers.

3.1 What is an appropriate cost of debt benchmark?

3.1.1 Must promote the long-term interests of consumers and encourage efficient financing behaviour

The NGO and NEO emphasise economic efficiency for the long-term interests of consumers. The NGO says:[9]

> *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.*

Likewise, the NEO says: [10]

> *The objective of this Law is to promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to:*
>
> *(a) price, quality, safety, reliability and security of supply of electricity;*
>
> *and*
>
> *(b) the reliability, safety and security of the national electricity system.*

[9] Section 23, National Gas (South Australia) Act 2008 (**NGL**).

[10] Section 7, National Electricity (South Australia) Act 1996 (**NEL**).

But what is this 'long-term interest'?

Consumers want the best quality, safe and reliable service at the lowest price in both the short- and long- terms. But there is a tension – or rather, a need to balance this want with efficient long-term investment in the networks. If prices are set too low or are too volatile, then this investment may not occur and the quality of service may fall.

To ensure that this investment does occur, NSPs must be financially viable over the long-term. This requires that businesses are provided with a reasonable opportunity to recover at least the efficient costs of providing the relevant services – as captured in the revenue and pricing principles (**RPP**).[11]

'Efficient investment' is linked directly with the concept of 'efficient financing costs', as set out in the allowed rate of return objective which says that:[12]

> *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 [regulated services].*

The argument goes that if the rate of return is based on efficient costs then this should attract efficient investment. For the cost of debt benchmark specifically, this means ensuring that NSPs can attract sufficient debt in the short-term to fund efficient long-term investment in their networks.

3.1.2 Can use competitive markets as a guide, but opportunity exists to depart to reduce costs and lower risks

The AER has drawn our attention to the outcomes of firms in competitive markets as a guide to what should be seen as efficient for firms in regulated businesses.[13] But in other places the AER also recognised that the regulatory framework creates differences between regulated and unregulated firms.[14] For instance, when discussing the relationship between risk and return, the AER noted:[15]

> *[I]t will be important to recognise the protections provided by the regulatory framework compared to companies that operate in competitive markets. It would also be important to recognise any obligations imposed on service providers that competitive firms may not be exposed to.*

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[11] Section 7A of the NEL and section 24 of the NGL.

[12] For example, NER, cl. 6.5.2(c) for electricity distribution.

[13] AER, *Rate of return guidelines – consultation paper*, 10 May 2013, pp. 118, 119, and 121.

[14] *Ibid*, pp. 37 and 80.

[15] *Ibid*, p. 37.

Jemena agrees that competitive markets provide useful insight for many issues that arise in economic regulation. In many cases these outcomes help distinguish between efficient and inefficient behaviour. For instance, the AER currently sets the benchmark debt and equity raising costs by reference to costs incurred across all industries, competitive or otherwise. NSPs that incur greater costs than the benchmarks are assumed to be inefficient, and those that incur lower costs are assumed efficient.

Competitive outcomes are not required under the NGL or NEL

But the NGL and NEL do not require that these outcomes are replicated exactly. If the opportunity exists to depart from what may occur in competitive markets to the benefit of both consumers and NSPs, then that opportunity should be perused – especially if this departure would better promote the NGO and NEO.

Departure from competitive outcomes can benefit consumers

Such departure is not new – and is precisely what is done with the RAB. In competitive markets the asset base of a firm is risky, with new technologies or bypass from competitors posing a threat. But regulatory regimes are designed to protect the value of the RAB from random shocks and competition – a benefit that is passed on to consumers in the form of more stable tariffs, and more certain investment returns over time.

Professor Yarrow and the other members of an expert panel to the NZCC make this exact point:[16]

> *Like long-term contracting, RAB-based regulation, as conventionally applied, has the effect of protecting investors against risks that are similar to some of the risks that can confront firms in workably competitive markets characterised by durable, sunk assets (buyer/regulatory opportunism, high downside exposures on sunk investments). There is, therefore, a distinct similarity (of this type of regulation) with a key feature of a workably competitive market in which long-term contracts are a major form of supply relationship. Indeed, regulation itself is often analysed as a type of (highly) incomplete contract between investors and consumers. In particular, we note that the notion of financial capital maintenance, particularly in relation to the risks of ex post opportunism, is likely to feature prominently in both situations (regulation, workable competition under the hypothesised circumstances).*

The same thinking can apply when setting the rate of return and the cost of debt benchmark specifically. One may observe that long-lived infrastructure businesses operating in competitive markets issue fixed rate debt evenly over time, refinancing an even amount of debt each year.

[16] Yarrow, G., Cave, M., Pollitt, M. and Small, J., *Asset Valuation in Workably Competitive Markets - A Report to the New Zealand Commerce Commission*, 31 May 2010.

But there is no guarantee that this financing practice gives consumers the best outcome in the long-term. In fact, consumers may benefit from other financing practices that involve lower long-term debt financing costs and risks. The AER has the opportunity to set a cost of debt benchmark that encourages these practices and realises these benefits.

3.1.3 Such departure represents a 'regulatory bargain' between consumers and NSPs

A more appropriate (and realistic) benchmark for how a benchmark efficient NSP should stagger its debt raising over time and use hedges to manage risk could benefit both consumers and NSPs.

Jemena considers that the hybrid benchmark does just this and represents a 'regulatory bargain' between consumers and NSPs to lower debt financing costs and risks over time and have this benefit shared among both parties – see sections 6.2.1 and 6.2.2.

Section 6.4 discusses where similar 'regulatory bargains' have been implemented recently by the QCA and NZCC.

4 Role of the Rate of Return Guidelines

Key points:

- The NGR and NER expressly allow for the use of alternative benchmarks when estimating the cost of debt.
- Even if the AER prefers only one benchmark, the guidelines should recognise this by detailing how it would apply each alternative.
- The benefits are two-fold:
  - stakeholders are encouraged to comment on how each alternative should apply during an industry-wide consultation rather than at individual price reviews
  - stakeholders are guided on how the AER would apply each if these were proposed and accepted at individual price reviews.
- Leaving the option open to switch between benchmarks (e.g. changes in market conditions or RAB) in certain circumstances supports the flexibility needed to promote long-term investment in regulated networks.
- The risk that NSPs will benefit from (and seek) windfall gains by switching can be managed using a transition mechanism – which is something that the AER is already exploring for the trailing average benchmark.

4.1 Should the guidelines set out only one cost of debt benchmark?

4.1.1 No, the NGR and NER include three benchmarks, and so should the guidelines

The NGR and the NER expressly allow for the use of alternative benchmarks when estimating the return on debt, as no one benchmark is efficient in all circumstances. Specifically, the rules allow three benchmarks:[17]

- the rate on the day

[17] AEMC, 29 November 2012, E*conomic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services*, *Final Position Paper*, p. 90.

See also: Rule 87(10), *National Gas Amendment (Price and Revenue Regulation of Gas Services) Rule 2012 No. 3*, and

Clause 6.5.2(j),*National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012 No.9*.

– a trailing average, and

– some combination of these two approaches – the hybrid.

In drafting the new cost of capital rules, the AEMC recognised that there are a number of efficient debt management strategies or practices – and that it was not possible to set one approach that would be efficient in all circumstances:[18]

> *The best methodology for estimating return on debt may not be the same for benchmark efficient service providers with different characteristics. Therefore, the rules should not prescribe a particular methodology for estimating the return on debt component.*

The AEMC went on to say that:[19]

> *The Commission intends that the regulator could adopt more than one approach to estimating the return on debt having regard to different risk characteristics of benchmark efficient service providers.*

The AER should recognise the AEMC's consideration and guidance on the rules when developing the guidelines.

4.1.2 *The guidelines should reflect this by detailing how the AER would apply each alternative*

Even if the AER preferred only one benchmark, the guidelines should set out how it would apply each of the three at a given price review or determination, -–and do so in enough detail so that stakeholders can estimate the return on debt using any of the benchmarks.

This is particularly important if one (or more) of the benchmarks offers a regulatory bargain between consumers and NSPs (see section 3.1.3). Having this set out in the guidelines would give consumers, in particular, an opportunity to debate the merits of this bargain.

Two key benefits are that:

– this debate occurs during the guidelines consultation process rather than at individual price reviews, where some stakeholders (and consumers in particular) are less-active participants[20] – the AER should benefit from stakeholders hearing this debate before finalising the guidelines

[18] AEMC, 29 November 2012, E*conomic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services*, *Final Position Paper*, p. 72.

[19] *Ibid*, p. 90.

[20] The recent establishment of the Consumer Challenge Panel may help address this concern, but the impact of this panel is yet to be seen.

- all stakeholders are given a guide to the AER's positions on how each benchmark would apply – helping NSPs prepare their cost of debt proposals and consumers (and other stakeholders) prepare their responses.

4.1.3 *The guidelines should also leave the option open for switching between benchmarks*

There are good reasons why the guidelines could set out a choice between benchmarks. If market conditions change and the debt management practices that were once efficient no longer are or no longer promote the long-term interests of consumers, then the guidelines could restrict the type of flexibility discussed by the AEMC unless the choice built into the rules is preserved.

For instance, one of the reasons for the recent rule changes by the AEMC was to:[21]

> *[P]romote flexibility and adaptability, to allow the regulator to make decisions in changing circumstances, and for service providers with different characteristics, such as network size and geography.*

The AER's intent of narrowing on one benchmark methodology does not achieve this stated AEMC intent.

The AEMC's intent requires that, if conditions change, NSPs (and other stakeholders) should be empowered to propose the cost of debt benchmark and assumed efficient practices that best suit these conditions. The AER is not compelled to adopt such proposals, but may find it hard to rationalise a change in preference for a given benchmark if the guidelines support only one.

The guidelines can make such rationalising easier. For instance, they could set out all three benchmarks, state a preference for one in particular, yet recognise that in some circumstances departure from this preference is warranted. Such circumstances could include the size of an NSP's RAB, the depth in derivative or capital markets, or changes in perceptions of risk.

A transition mechanism can remove incentives to seek windfall gains

The AER's concern that leaving this option open may give NSPs an incentive to switch between benchmarks in search of windfall gains,[22] is valid – but can be managed using a well-specified transition mechanism. Such a mechanism is contemplated in the NGR and NER[23] – and the task of developing such a mechanism is already being considered by the AER.

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[21] AEMC, 29 November 2012, E*conomic Regulation of Network Service Providers, and Price and Revenue Regulation of Gas Services*, *Final Position Paper*, p. ii.

[22] AER, *Rate of return guidelines – consultation paper*, 10 May 2013, p. 52.

[23] For example, NER, cl. 6.5.2(k)(4) for electricity distribution

As the AER notes, in moving from the rate on the day benchmark to a portfolio benchmark, that:[24]

> *[I]t would be important to manage the transition so that both consumers and service providers are not unduly impacted. Any transition between two approaches should satisfy the NPV=0 condition, so as to mitigate the scope for sub-optimal outcomes in moving from one approach to the other.*

Section 6.3 discusses transitions further.

NSPs face incentives to reduce uncertainty, which is not helped by regularly switching between benchmarks in search of windfall gains

Even if NSPs have an incentive to select the benchmark that results in the highest allowed revenue, this is not the only incentive they face. A consequence of seeking revenues or yield is that investors may face extra risk – which affects the ability of NSPs to raise funds to invest in the network.

Most investors in regulated NSPs seek the stable cash flows offered by the regulatory regime. Any increase in the volatility of these cash flows – for instance by regularly switching between benchmarks – will make it harder for NSPs to raise the funds needed to invest in the network unless the extra risk is more than offset by the windfall gain. As a result, many NSPs are restricted from seeking yield, speculating on markets, or holding unhedged debt positions – and Jemena is no exception (see appendix A).

Responses to the recent rule changes highlight why these restrictions are so important. In changing its outlook on the Australian regulated utilities sector to negative recently, Moody's Investor Service said that:[25]

> *The negative outlook reflects the increased uncertainty in the regulatory environment following the introduction of new rules in November 2012 that govern the revenue-setting process for the utility networks sector.*
>
> *"The new rules challenge the sector's credit profile by reducing the predictability of regulated revenues. In our view, the increased emphasis on regulator discretion under the new rules will likely reduce revenue predictability in the future, particularly because there isn't a track record on how these powers will be exercised," says Spencer Ng, a Moody's Assistant Vice President and Analyst.*

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[24] AER, *Rate of return guidelines – consultation paper*, 10 May 2013, p. 55.

[25] Moody's Investor Service, *Announcement: Moody's: Negative outlook on Australian regulated utilities*, 21 February 2013. http://www.moodys.com/research/Moodys-Negative-outlook-on-Australian-regulated-utilities--PR_266517.

Even if this statement does not reflect the view of all investors, the statement by itself makes it harder to raise funds. Given this outlook, NSPs would struggle to convince their investors that seeking windfall gains is beneficial unless these gains were significant – which is something that a well-specified transition mechanism could ensure will not be the case.

5 Options for the debt raising benchmark

Key points:

- The rate on the day, trailing average, and hybrid benchmarks are well understood, but these are repeated for clarity.
- For the hybrid benchmark specifically, Jemena proposes using two swap transactions to convert a trailing average into a mix of trailing average (i.e. the DRP) and short term average (i.e. the swap rate) when estimating the cost of debt.
- Minimising refinancing risks is key to effective debt management – so it is important that the AER considers these when assessing the three benchmarks:
  - the rate on the day benchmark is difficult to hedge in practice
  - the trailing average benchmark is difficult to hedge for small NSPs, and
  - the hybrid approach benchmark is difficult to hedge for large NSPs.
- Swap transaction costs are currently approximately 8 to 10 basis points – and are easily estimated by independent third parties as has been done for the QCA recently.

5.1 Description of the key features of the three alternatives

5.1.1 Rate on the day benchmark

The rate on the day debt raising benchmark represents the status quo and assumes that NSPs refinance their entire debt portfolios during a 10–40 business day averaging period at the start of each regulatory period.

The benchmark cost of debt is calculated as the average yield on the assumed benchmark debt over the averaging period. This benchmark debt has traditionally reflected the Bloomberg BBB fair value curve at 10 year maturity, or an extrapolation to reach this maturity. The cost of debt is often split into debt risk premium (**DRP**) and risk free rate components by subtracting the yield on 10 year Commonwealth Government securities calculated over the same averaging period.

5.1.2 Trailing average benchmark

The trailing average benchmark assumes that debt is issued evenly over an historical period. There are several methods to calculate the cost of debt for this benchmark. One method takes a simple trailing average of yields on BBB+

corporate bonds (i.e. often estimated using Bloomberg fair value curves) with a benchmark term to maturity that matches the averaging period used.

This period would roll-forward every year, but the upshot is that it leads to a fairly smooth debt maturity profile. If the averaging period is, say, 10 years, then the benchmark assumes that NSPs will refinance 10 per cent of its debt portfolio every year.

There is still debate over what a transition mechanism – to this benchmark from the rate on the day – or annual updating would look like, or even if these are needed at all.[26] Jemena supports the ENA's submission on these issues.

5.1.3 Hybrid benchmark

The hybrid benchmark – as the name suggests, is a hybrid of the rate on the day and the trailing average benchmarks. Under the hybrid benchmark, the cost of debt is split into three components:

- a DRP, calculated as a trailing average of the spread between a cost of debt with a benchmark term (e.g. 10 years) and a swap with the same term
- a base rate, calculated as the average yield on swaps with a term equal to the length of the regulatory period over a short term averaging period (e.g. 20 to 40 business days) near the start of the regulatory period
- a transaction cost caused by entering the swap transactions needed to set the base rate equal to the averaging period.

Other variations on this benchmark exist, such as using CGS yields instead of swaps. But for the reasons set out in section 5.2.3, Jemena considers that the above reflects efficient financing practice.

5.2 Efficient hedging and risk management under the three options

Refinancing risk is the risk that an NSP's operations are negatively impacted by an inability to access financial markets in a timely manner. Impacts may include:

- higher funding and issuance costs
- restrictive covenants for debt holders, including limited ability to pursue growth plans, increased vulnerability to adverse economic and industry conditions, limited flexibility to plan or react to business and industry changes, and
- inability to refinance, leading to an event of default.

[26] For instance, see: AER, *Rate of return guidelines – consultation paper*, 10 May 2013.

The AER should consider these risks when determining a cost of debt benchmark. As discussed in section 6.1, there are some serious impediments that some NSPs face when trying to mimic the behaviour (or at least the outcome) assumed for the trailing average benchmark.

The efficient debt management practices for all three benchmarks are discussed in the next three subsections.

5.2.1 Rate on the day

Under this benchmark, efficient debt management would require NSPs to retire all of their debt over the short-term averaging period.

In practice, no NSPs regulated by the AER actually refinance their entire debt portfolio during the averaging period. Doing so would expose most NSPs to an unacceptable risk that they are unable to raise debt during the short-term averaging period. Capital markets are constantly changing so there is no guarantee that an NSP could get a debt issue away over that period. For larger NSPs with much larger debt portfolios, this concern is compounded by the uncertainty over whether these markets are deep enough to handle their refinancing needs.

Instead, NSPs typically use swap transaction to hedge interest rate exposure for the duration of the regulatory period (see appendix A) and issue timing and market choice to manage risks in the DRP component. Consistent with Jemena's current refinancing policy, managing the latter risk may require it to refinance a portion of its debt portfolio in any one year.

5.2.2 Trailing average

Under this benchmark, all NSPs are assumed to issue their debt evenly over time with a constant term to maturity. But, as discussed in section 6.1 and appendix A, small NSPs like Jemena may struggle to implement this assumed debt management practice.

5.2.3 Hybrid

Under this benchmark, NSPs would hedge their interest rate exposure by setting the term of the base rate on their debt (using swaps) equal to the length of the regulatory period – much like many private NSPs like Jemena do currently when hedging the rate on the day benchmark (see appendix A).

Specifically, base rate is hedged by entering two swap transactions:

- the first swap converts the 10 year fixed rate to a 10 year floating rate; and

- the second swap converts the floating rate back to a fixed rate over 5 years – to match the term of the regulatory period.

This hedging strategy can achieve economies of scale by supporting NSPs to undertake a sufficiently large volume hedging transactions once every five years – thereby saving on direct transaction costs.

Taking interest rate exposure off the table not only reduces the refinancing risk – by leaving only the DRP at risk of market fluctuations – but also reflects a debt management practice that investors and credit rating agencies are very familiar with for NSPs like Jemena, and therefore prefer. This can help drive down the required rate of return from lenders achieving lower transaction costs for NSPs and their consumers in the long-term.

Not only do investors prefer the predictability of this benchmark, but it also lets NSPs align their refinancing risk with the trailing average DRP component more easily than with the rate on the day benchmark. This affords NSPs the most efficient pricing to minimise its DRP basis risk.

For NSPs like Jemena, the hybrid benchmark also minimises treasury management administrative costs compared to the comparatively more complex portfolio management strategies needed for the other two benchmarks.

Importantly, the hybrid benchmark will not work for all NSPs. As the ENA submission notes, many NSPs prefer the trailing average approach – and do so for a number of reasons. Jemena's position is that all NSPs should have the opportunity to propose a cost of debt benchmark that is efficient for a network with their characteristics.

5.3 Transaction costs of hedging

5.3.1 Hybrid benchmark will attract some transaction costs

NSPs that hedge the hybrid benchmark will incur transaction costs in the form of swap costs. Two swaps are needed as noted in section 5.2.3.

But these costs are fairly modest – and as explained in section 6.2.1 more than offset by the spread between five and 10 year swaps to give a lower long-term cost of debt. Recent estimates suggest that swap transaction costs are between 8 and 10 basis points (see section 5.3.3).

5.3.2 Cost estimates are used in regulatory decisions

The main difficulty of estimating swap transaction costs is that these swaps are traded over the counter, with no published values available – but that has not

stopped regulators like the QCA and NZCC estimating these costs effectively (see section 6.4).

For instance, since its 2010 Queensland Rail network (**QR Networks**) decision, the QCA has applied a swap transaction cost benchmark for the entities that it regulates. In that decision the QCA noted that:[27]

> *The Authority's empirical analysis determined that, in general, interest rate swaps are sufficiently available or a benchmark firm with a debt level and credit rating comparable to QR Network, and that the annualised cost is 15-20 bp with a mid-point of 17.5 bp.*

Subsequently, the QCA obtained estimates of swap costs for each NSP that it has undertaken a price review for. The latest example is the QCA's SEQ Retail Water Price Review, for which the QCA obtained an estimate of current interest swap rates from Evans & Peck.[28]

The Evans & Peck report is relatively short (4 pages), and determined a swap rate of 13.5 basis points for swapping 10 year fixed BBB debt to 2 year fixed BBB rated debt. Evans & Peck's methodology was to approach swap dealers and obtain quotes for businesses with the characteristics requested. It noted that the cost of debt had started to fall in Australia as a result of easing pressures in the Eurozone, and that swap costs were also falling in line with interest rate falls.

5.3.3 Methodology and recent estimates

In pricing a swap, banks (and other counterparties) separate the transaction cost into three components: the credit charge, the capital charge, and the execution charge:

- The **credit charge** and **capital charge** are related to the risk of the counterparty, and depend on the credit rating, the estimated loss given default, and the return on attributed equity – the higher the perception of risk the higher is this component of the transaction cost.
- The **execution charge** compensates the swap intermediary for market fluctuations while it enters other transactions to offset the swap (i.e. back-to-back hedging) – the greater the perceived exposure to these fluctuations the greater the transaction cost.

[27] QCA, *QR Network's 2010 DAU – Tariff and Schedule F*, June 2010, p. 37.

[28] Evans & Peck, *Queensland Competition Authority: SEQ Retail Water Price Review*, 4 February 2013.

Swap cost estimates will fluctuate over time depending on economic conditions. Recent estimates that we are aware of for swapping from 10 year fixed rate debt to shorter terms aligned with the regulatory cycle are:

- *QCA for QR Rail in 2010* – as noted, 17.5 basis point was estimated as the cost of swapping from 10 year fixed rate BBB+ debt to 5 year fixed rate BBB+ debt. This was estimated by reference to quotations from the market for significant (several $billion) swap transactions during a period that was still affected by the GFC. Hence, it could be considered to be at the high end of swap transaction costs.
- *QCA (Evans & Peck) for SEQ water retail businesses (February, 2013)* – as noted, Evans & Peck also surveyed swap market dealers to obtain quotations for the benchmark swap transaction, which was assessed at 13.5 basis point.
- *Our banks* – in the last month, we obtained quotations from two banks for swapping 10 year fixed rate BBB+ debt to 5 year fixed rate BBB+ debt (see Table 5-1).

Table 5-1: Comparison of swap transaction costs.

Institution	Credit margin	Execution cost	Total cost
Bank A	6–8 bp	2–3 bp	8–11 bp
Bank B	3.8 bp	4 bp	7.8 bp
Average	4.9–5.9 bp	3–3.5 bp	7.9–9.4 bp

On the basis of this evidence it appears that a reasonable benchmark at the present time would be a swap transaction cost in the range of 8 to 10 basis points.

5.3.4 Conclusion

The QCA has used swap transaction costs in its rate of return decisions since 2010, and has used estimates that range from 17.5 basis points then to 13.5 basis points in February 2013.

We expect that in normal markets a benchmark transaction cost to 10 basis points. Consultants like Evans & Peck (and others) can undertake benchmark estimates of these costs when required – as is already being done for the QCA required basis.

We also expect that Basel III and other proposed changes to the regulation of swap transaction will have a relatively limited impact on transaction costs – especially given that many of these will already be factored into current transaction pricing. Appendix C provides further discussion of future transaction costs.

6 Assessment of options

Key points:

- NSPs of JEN and JGN's size cannot implement the trailing average benchmark effectively. Unless the extra risks and costs imposed by this benchmark are compensated, smaller NSPs may struggle to raise efficient investment in their investments.
- A better benchmark for NSPs of JEN and JGN's size is the hybrid benchmark – which benefits our customers (in lower tariffs in the long-term) and Jemena (in lower financing costs and risks).
- If implemented today, the hybrid benchmark would set a cost of debt that is 48 and 238 basis points lower than the rate on the day and trailing average benchmarks, assuming swap transaction costs of 10 basis points.
- In the long-term, the hybrid benchmark could result in a cost of debt that is 25 to 28 basis points lower than the other two benchmarks (again after transaction costs).
- Our customers also benefit from lower volatility relative to the rate on the day hybrid benchmark, although they face greater volatility than under the trailing average benchmark.
- The AER would not be alone if it adopted a hybrid benchmark for some or all firms – a similar benchmark is used by both the QCA and the NZCC.

6.1 Consequences for small firms of imposing the trailing average

6.1.1 Size is important when assessing efficient debt management practices

Some observers foreshadowed that views on the trailing average benchmark may differ between small and large NSPs because of differences in size. This is code for saying that differences in size mean that NSPs may face different risks and opportunities when implementing this benchmark. Some may find it a desirable benchmark, but others (like Jemena) may not.

Our concern is that we cannot easily implement the debt management practices assumed in the trailing average benchmark – and that this will negatively affect our ability to raise funds to invest in Jemena's networks. Our banks, investors and ratings agencies are focused on how well we can hedge interest rate risk, and we cannot yet tell them how we would do this under the trailing average.

This concern is due to our small size. Jemena has only $2.3 billion ($nominal) of assumed regulatory debt (see section 2.3.1). As noted in appendix A, this size debt portfolio is manageable for Jemena under either the current (rate on the day) or hybrid benchmarks, but it is unclear under the trailing average.

The AER should consider size when considering the appropriate benchmark because the assumed size of a debt portfolio will affect the efficiency of different debt management practices. Helpfully, this position is summarised in the AER consultation paper:[29]

> *Stakeholders have suggested that what represents efficient debt financing may depend on the funding needs of the benchmark entity. In particular, it might be inefficient to issue debt parcels smaller that some minimum size. In that case, the efficient debt issuance practices (e.g. the frequency of debt issuance, debt tenor, etc.) for smaller businesses might differ from that of larger service providers. One way to accommodate this difference is to consider two (or more) benchmark efficient entities with differing debt financing needs, such as a "small" and a "large" benchmark efficient entity. However, there was no consensus amongst stakeholders on the relevance of size for the benchmark.*

Jemena agrees that separate benchmarks for small and large benchmark efficient entities could work. One way to calculate this would be to take the minimum efficient debt issue, such as a minimum Australian benchmark trade, and scale this up by the number of years in the averaging period.

A benchmark trade of, say, $250 million over a 10 year averaging period may suggest that an NSP could manage the trailing average with an assumed regulated debt portfolio of $2.5 billion – which, with assumed leverage of 60 per cent, suggests a RAB of $4.2 billion. But this '$250 million' is only a placeholder; more work would be needed to determine the appropriate size, such as conversations with banks and other capital market participants.

Other considerations are also relevant, such as whether it makes sense to encourage debt issues of this size. For instance, Jemena tends to issue bonds at longer terms in amounts of up to $500 million across a range of domestic and foreign markets when market conditions are advantageous. In doing so, Jemena seeks to optimise is financing costs. Such behaviour would not be possible if maximum debt issue sizes were imposed (indirectly) by the benchmark used.

[29] AER, *Rate of return guidelines – consultation paper,* 10 May 2013, p. 51.

A recent staff paper from the Australian Competition and Consumer Commission (**ACCC**) recognised that larger firms should be able to match the trailing average, but that smaller firms might struggle:[30]

> *The small regulated businesses maybe a bit worse off as it has to enter swap contracts more frequently which may expose it to higher transaction costs. However, this outcome is considered to be preferred to a situation where the majority of the businesses are not able to hedge their exposure at all. As a result, the averaging should apply to the entire cost of debt and not just the credit spread… Alternative, if small businesses actually stagger their debt they should have a natural hedge and as a result they do not require any swap contract to hedge their cost of debt exposure.*

If small NSPs cannot actually achieve that natural hedge, then the paper effectively suggests that the negative outcomes (higher costs) to smaller firms from facing a trailing average benchmark are justified by the benefits (lower costs) to larger firms. This is an odd statement that does not reflect good policy. If these costs continued indefinitely, then smaller NSPs would be encouraged to merge debt portfolios to reduce costs – which is an outcome not expressly included in the NGL or NEL.

Jemena considers that the rationale displayed in the ACCC staff paper is at odds with the NEO and NGO. Jemena finds it unacceptable to JEN and JGN that their customers' prices be inflated because the AER is unwilling to adopt fit for purpose variances in debt benchmarking, particularly where such variance is provided for in the rules and was the express intent of the AEMC. Furthermore, the AER should be cautious of such unintended consequences when setting the cost of debt benchmark. Helpfully, there are regulatory precedents where firms in the same industry are treated differently on the basis of size.[31]

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[30] Henryk Smyczynski and Igor Popovic, *Estimating the Cost of Debt: A Possible Way Forward*, Regulatory Development Branch, Australian Competition and Consumer Commission, April 2013, p. 25.

[31] For example, Ofwat in the UK treats smaller water NSPs differently from larger NSPs.

See: Ofwat, *Future water and sewerage charges 2010–15*, 2009, *pp. 135–135:*

> *Our determinations include a small cost of debt premium of 0.1% for the two largest water only companies and 0.4% for all of the other water only companies*

and, Ofwat, *Setting Price Controls for 2015-20 framework and approach – A consultation*, 2013, p.128:

> *Again we propose using market evidence to determine whether a small company premium for water only companies is justified.*

6.1.2 *Consequences of the trailing average approach for a smaller business*

Smaller NSPs like Jemena face adverse consequences from the trailing average approach – and these will ultimately affect consumers. For instance, if smaller NSPs seek to replicate the 'natural hedge' they would:

- need to undertake a larger number of smaller bond issues than they do currently, which raises transaction costs, and
- be at a negotiating disadvantage in debt markets – because the size of each is smaller than the benchmark trade – and so would incur a higher cost of debt.

These outcomes are not efficient. If smaller NSPs opt to not seek the 'natural hedge', then they must use derivatives try to be – which are costly and likely ineffective (see appendix A).

The risk faced by Jemena (and other small NSPs) as a result of not hedging efficiently is systematic. If this risk rises because the AER moves to a trailing average benchmark from the rate on the day, then this may push up Jemena's beta, push down its credit rating, or both. If the move to a new benchmark was considered efficient, then these consequential impacts to credit rating and beta should also – and compensation should be provided as part of the total regulated WACC to offset these.

This is particularly important because the AER currently sets the credit rating and beta using current and historical Australian market data that reflects the cost of debt benchmark and resulting debt management practices that were used during that time. Most Australian share market listed NSPs use swaps to align their interest rate exposures with the regulatory period. If the cost of debt benchmark changes, then so would the likely use of swaps by these NSPs – with a resulting impact on credit rating and beta.

As a minimum, the AER should consider whether a change in benchmark would have a material impact on these risk measures when setting the WACC. If extra risk is created and not compensated, then there is a risk that the efficient investment embodied in the NGO and NEO will not materialise as smaller NSPs struggle to attract investors that seek stable, low risk cash flows from regulated infrastructure.

6.2 Expected outcomes for our customers

6.2.1 Average allowance for the cost of debt

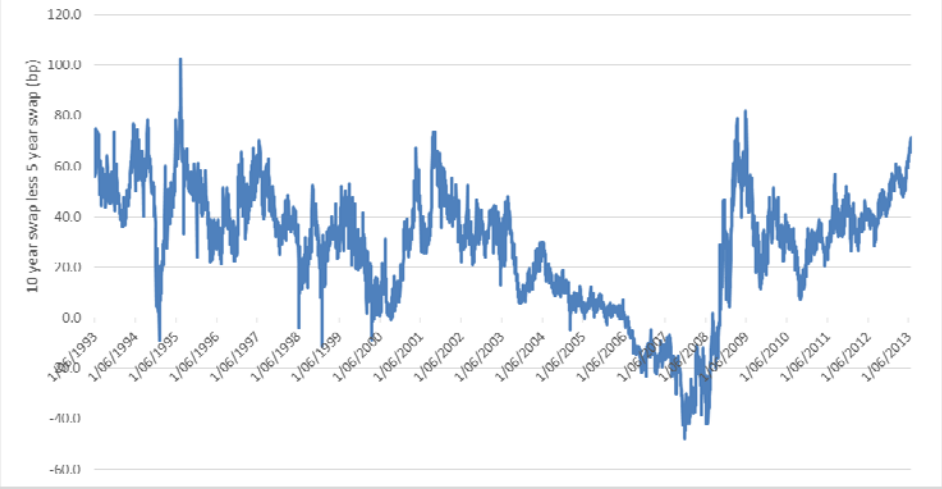
Jemena's customers will likely benefit from the hybrid benchmark in the long-term

The hybrid benchmark gives a lower cost of debt in the long-term provided the spread between five and 10 swap rates – to match the length of the regulatory period and the term of benchmark debt respectively – remains higher than the swap transaction costs discussed in section **Error! Reference source not found.**.

This is the case now and was the case over the last four years. If this continues, then our customers would benefit from lower tariffs in the long-term under the hybrid benchmark than under the other benchmarks.

Figure 6-1 shows that the spread between the five and 10 year swap rates has ranged from above 100 basis points down to negative 50 basis points during the global financial crisis (**GFC**). Since 1993 (after the RBA adopted inflation-targeting) the spread has average about 28 basis points including the GFC, and 27 basis points excluding it. If we also exclude the anomalous bull market period leading up to the GFC (from 2004), the spread rises to 38 basis points. Over the last five years the average spread was 35 basis points. If these last two values reflect the likely long-term spread, then consumers can expect a cost of debt 25 to 28 basis points lower than under the other two benchmarks, assuming transaction costs of 10 basis points (see section **Error! Reference source not found.**).

Figure 6-1: Spread between five and 10 year swap rates.



Source: Bloomberg data, Jemena analysis.

The period of negative spread (from 2006 to 2008) may concern some, especially if this is expected to continue. But this 'inverted' swap curve is rare in financial markets and typically reflects periods of major distress in the financial markets – such as the GFC here – or periods of anomalous market outperformance – such as the bull market leading up to the GFC. For the 1993 to 2013 period the curve was inverted only 12 per cent of the time. Assuming a 10 basis point transaction cost, this suggests that the hybrid benchmark will result in a lower cost of debt than the rate on the day benchmark 77 per cent of the time.

Unless such periods start to occur more frequently in the future, we can assume that their impact on the swap spread in the long-term remains limited. Finance theory predicts that swap curves are upward sloping in normal market conditions[32] – and so provides further comfort that inverted swap curves should remain rare.

Our customers would also benefit if the hybrid benchmark was adopted now

The hybrid benchmark gives the lowest cost of debt if applied today (or if at any time since at least December 2011).

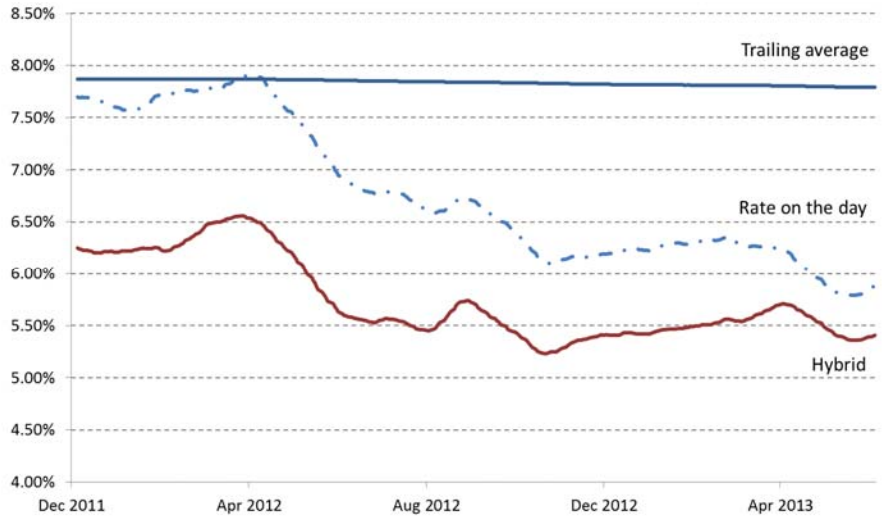
Figure 6-2 compares the cost of debt estimated from all three benchmarks from December 2011 until now. If applied using averaging periods that end on 5 June 2013 then the cost of debt for the trailing average, rate on the day and hybrid benchmarks are 7.71, 5.89 and 5.41 per cent respectively. If adopted today, the hybrid benchmark would lower the cost of debt by 48 basis points.

[32] For instance, see: Moorad Choudry, *The impact of demand and liquidity on the information content and predictive power of the government bond yield curve: an illustration from the UK gilt market, Birbeck College*, University of London (1999) p. 5:

> *In practice interest-rate swaps are priced off the government yield curve, and reflect the market's view of interbank credit risk, as the swap rate is payable by a bank (or corporate) viewed as having an element of credit risk.*

Choudry's analysis showed that interest rate swap curves are more often positively sloping than government bond yield curves in the UK.

Figure 6-2: Comparison of benchmarks if applied today.



Source: Bloomberg data, Jemena analysis.[33]

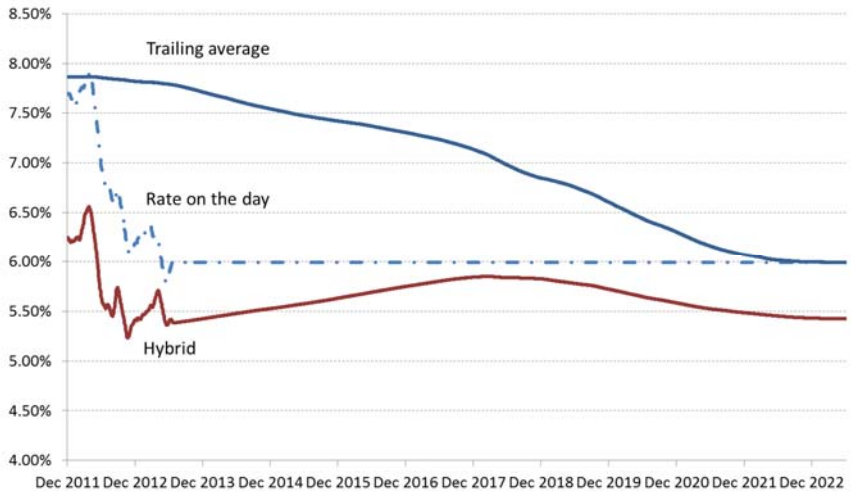
Note: data only exists for the Bloomberg BBB fair value curve back to 4 December 2001, which means we can only calculate a 10 year trailing average of this curve as far back as December 2011.

Likewise, our customers benefit if current rates remain constant from now onwards

Figure 6-3 compares the three benchmarks if rates stay at their current levels for the next 10 years (out to 2023). This shows that while the gap between the hybrid and rate on the day benchmarks narrows, it settles at 57 basis points by 2021 – which represents the current spread between the five and 10 year swap rates (of 67 basis points) less a swap transaction cost (of 10 basis points).

[33] The 'trailing average' is calculated as the 10 year trailing average on the Bloomberg BBB fair value curve extrapolated to 10 years where no curve exists using other Bloomberg fair value curves or the Commonwealth Government Security (**CGS**) yield curve. The 'rate on the day' is calculated using the same extrapolated curve, but by taking a 20 business day average instead. Finally, the 'hybrid' is calculated by, first, taking the 10 year average spread between the same extrapolated curve and 10 year swap rates and, second, adding this to 20 day average of five year swap rates plus a 10 basis point swap transaction cost.

Figure 6-3: Benchmarks if rates stay constant into the future.



Source: Bloomberg data, Jemena analysis.

This figure also shows that for a short period around 2017 the hybrid and rate on the day benchmarks get closer together. However, as the benchmarks settle at long-term levels the gap between these two reverts to the 57 basis points noted above.

Importantly, the figure also shows that the rate on the day and trailing average benchmarks converge in the long-term. This is expected because although the rate on the day approach jumps straight to the current rates – when current rates are held constant – the trailing average approach takes the full 10 years to converge to these completely.

Summary

Under the hybrid approach, we can expect our customers to benefit in the long-term by facing a cost of debt about 25 to 28 basis points lower than the other benchmarks. No one can foretell whether we will ever reach this long-term, but we can predict using current data.

Added to this is the benefit that some NSPs, including Jemena, can hedge the hybrid benchmark much better than the other two – and so investment certainty for these NSPs is greatly improved. This benefits our customers by setting up conditions for efficient investment in the network.

As discussed in section 6.2.2, the hybrid benchmark also offers our customers significantly less volatility in the cost of debt than the rate on the day benchmark.

6.2.2 Volatility

Although more volatile than the trailing average benchmark, the hybrid offers a range of other benefits

The AER is concerned that by applying a trailing average only to the DRP, the hybrid benchmark adds greater volatility to the cost of debt estimate compared with the trailing average benchmark.[34] Mathematically this statement is correct, but it is only part of the story.

The hybrid benchmark also:

- provides a lower price to our customers compared with the trailing average benchmark and the 'spot' approach (see section 6.2.1)
- helps regulated business undertake optimal financing policies (see section **Error! Reference source not found.**), which will bring down the cost of debt, and
- is significantly less volatile than the rate on the day benchmark (see below and appendix B).

Our analysis shows that the hybrid is less volatile than the rate on the day, unless unrealistic assumptions are made

Appendix B includes our detailed analysis of the relationships between the key variables that drive the cost of debt estimate and its volatility.

Our analysis shows that the hybrid benchmark is less volatile than the rate on the day benchmark. While the hybrid benchmark will introduce more volatility than the trailing average benchmark, this would be offset by the advantages to our customers in the form of lower prices – achieved through hedging policies – and better access to investment for smaller NSPs

A conclusion that may be drawn from our analysis is that the hybrid benchmark may induce volatility compared to the rate on the day benchmark if changes in CGS yields are offset by changes in the credit margin over swap. But this is an unrealistic assumption. If the DRP measured against bonds moves to offset changes in bonds, this offsetting movement is likely to manifest itself into changes in the bond-swap spread – implying that commercial margins change more generally across the economy – rather than in the margin over swap – which is the issuer specific margin.

[34] AER, *Consultation paper – Rate of return guidelines*, May, p.163.

6.3 Transition

We are not clear whether a transition is needed to implement the hybrid benchmark, especially given that our current debt management practices already reflect the efficient behaviour assumed for this benchmark.

It is not clear whether a transition is needed for our customers either. As shown in Figure 6-2, jumping straight to the hybrid benchmark today does not hurt our customers. This may change over time, of course, but we cannot tell.

If a transition mechanism was needed, then Jemena would support using the same type of transition proposed in the ENA submission in relation to the trailing average benchmark. The only difference when applying this to the hybrid benchmark is that only the DRP component is transitioned, not the base rate. Jemena would also support this transition being implemented using some form of true-up mechanism that applied at future resets rather than complicate the transition unnecessarily using an annual update to tariffs.

Importantly, Jemena supports a transition mechanism with annual tariff updates if the trailing average were applied. Both are needed to ensure that the efficient debt management practices assumed in the current (rate on the day) benchmark are fairly transitioned to the new (trailing average) benchmark. This point is covered in the ENA submission.

6.4 Comparison to other regulators

If the AER were to adopt the hybrid benchmark, it would not be alone. Both the QCA and the NZCC use similar benchmarks when setting the cost of debt across a range of regulated industries.

Queensland Competition Authority

In recent decisions for water and rail networks, the QCA used a hybrid benchmark that assumed that an efficient NSP:[35]

- issued 10 year fixed rate debt
- swapped the base rate on this debt (using interest rate swaps) from fixed to floating
- swapped this floating base rate (again using interest rate swaps) into a fixed rate for a maturity that matched the length of the regulatory period (e.g. five

[35] See: QCA, *Final Report: SEQ Interim Price Monitoring for 2010/11: Part B – Detailed Assessment,* March 2011.

QCA, *QR Network's 2010 DAU – Tariffs and Schedule F, Draft Decision*, June 2010.

years for QR National and three years for SEQ water and wastewater distribution and retail services), and finally

- swapped the debt margin on the fixed rate debt (using credit default swaps) from a 10 year maturity to one that matched the length of the regulatory period.

The QCA then determined the cost of debt by summing a debt margin, a base rate (calculated using CGS yields), compensation for swap transactions, and a proxy for credit default swaps. To this, the QCA also added refinancing (or debt raising costs).

As Bob Officer and Steven Bishop note, the QCA reasons that:[36]

> *while maintaining the view that the term to maturity for the risk-free rate and debt margin should match the length of the regulatory period, it accepted advice that regulated businesses are more likely to borrow for longer terms (i.e. 10 years)*

and concludes that it is:[37]

> *reasonable to fix interest rates for the regulatory period and incur the associated swap cost.*

New Zealand Commerce Commission

The NZCC also uses a hybrid benchmark when setting the cost of debt for NSPs that face a regulatory period that is shorter than the assumed maturity of debt. In deciding on its input methodologies for New Zealand airports, the NZCC said that:[38]

> *Unlike the risk-free rate which can be hedged, the greater debt premium on long term debt cannot be hedged economically. The Information Disclosure (ID) Determination provides an allowance (the term credit spread differential) which compensates for the greater debt premium on long maturity debt where the firm has an average original tenor (time to repayment) which exceeds the regulatory period. As part of this allowance, the ID Determination also compensates a qualifying regulated supplier (that is, a supplier with an average debt tenor which is greater than the regulatory period), for executing an interest rate swap (to hedge the risk-free rate).*

Like the QCA, the NZCC recognises that:

- NSPs will fund investment in their networks by issuing debt with terms that are longer than the regulatory period, and

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[36] Dr Steven Bishop and Professor R. Officer, *Review of Debt Risk Premium and Market Risk Premium*, February 2013, para. 36.

[37] *Ibid*, para. 36.

[38] NZCC, *Input Methodologies (Airports) – Reasons Paper*, December 2010, pp. 235.

– these NSPs need compensation if the term of cost of debt benchmark is set equal to the length of that period.

The NZCC goes on to confirm that "prudent management of re-financing risk by issuing debt with a long period to maturity is in the long term interests of consumers".[39]

[39] *Ibid*, pp.239.

Glossary

ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
AMI	advanced metering infrastructure
CGS	Commonwealth Government Securities
DNSP	distribution network service provider
DRP	debt risk premium
ENA	Energy Networks Association
GFC	global financial crisis
JEN	Jemena Electricity Networks (Vic) Ltd
JGN	Jemena Gas Networks (NSW) Limited
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
NGL	National Gas Law
NGO	National Gas Objective
NGR	National Gas Rules
RPP	revenue and pricing principles
SPIAA	SPI (Australia) Assets Pty Ltd
WACC	weighted average cost of capital

Appendix A Jemena's debt management practices

Key points:

- Jemena issues a mix of fixed and floating rate debt across a range of markets.
- Jemena manages its exposure to interest rate risk from the current cost of debt benchmarks for JGN and JEN using derivatives such as interest rate swaps.
- Jemena would not need to change its debt management practices to implement the hybrid benchmark – in fact, this benchmark better reflects Jemena's current debt management practices than the current (rate on the day benchmark).
- Although Jemena refinances a portion of its debt each year, the trailing average benchmark would not provide a 'natural hedge' to interest rate risk.
- For this benchmark to be 'workable', Jemena would need to:
  - rebalance its portfolio so that an even amount of debt matured as assumed in the trailing average (e.g. over the same 30 day averaging period each year) which may not be possible, and
  - use a much more varied and costly pool of derivatives to manage any remaining interest rate exposure than it uses currently.
- Both of these are untested with the market and would add material cost and risk to Jemena.
- Implementation issues, such as transition of the base rate and annual updating, would also create problems.

Current practice under the rate on the day approach

Managing the benchmark

Jemena enters a set of pay fixed five year Australian dollar 'plain vanilla' interest rate swaps during the JGN and JEN averaging periods once every five years to hedge the risk free rate (base rate) component of the cost of debt allowances. This hedging aims to remove the base interest rate exposure that Jemena faces every time this rate is reset.

As there are currently no viable derivate options to manage the DRP risks, Jemena manages its exposure to movements in its actual DRP relative to the DRP allowance by selecting the timing and market of its debt issues. Jemena aims to

incur a DRP that does not exceed the DRP allowance and, if possible, outperforms it.

Managing interest rate exposure

Jemena's management of interest risk is explained in SPIAA's financial statements:[40]

> *The Group is exposed to the risk of movements in interest rates on its borrowings. In addition, the regulated electricity distribution business and gas distribution business revenues are impacted directly by changes in the interest rates relating to each of their respective price review periods. This is a result of the "building block" approach where interest rates are considered in the determination of the regulatory weighted average cost of capital and consequently, regulated revenues. The price review period is five years for gas and electricity distribution*
>
> *The objective of hedging activities carried out by the Group in relation to these businesses is to minimise the exposure to changes in interest rates by matching the actual cost of debt with the cost of debt assumed by the regulator when setting the rate of return for the relevant business. The exposure is managed by maintaining an appropriate mix of fixed rate and floating rate borrowings and by the use of [interest rate swaps].*
>
> *The debt portfolio of the Group consists of both floating rate debt and fixed rate debt. The Group's interest rate hedging policy is linked to debt notionally allocated to the asset classes. Interest rate derivatives are used in order to maintain the percentage of allocated fixed rate debt according to the asset classes (Jemena, which includes regulated network assets and pipelines; and Zinfra, which is a contracting services businesses), as approved by the Board. Hedging of the regulated assets is aligned with tenures linked to the respective regulatory reset periods.*
>
> *…*
>
> *Due to the Group's interest rate risk management policies, the exposure at a corporate level to interest rate risk at any point in time is significantly reduced. [As at 31 March 2013], 87.16% of the Group's borrowings are fixed through either fixed rate debt or pay fixed [interest rate swaps].*

[40] SPIAA, *2013 Financial Statements*, p. 57.

Debt refinancing

c-i-c [redacted][41]

Debt management practices under the alternative benchmarks

A move from the rate on the day to a hybrid benchmark is acceptable to Jemena

The hybrid approach reflects Jemena's current debt management practices well. It assumes that the benchmark NSP issues fixed rate debt over time and then swaps the base rate component into a fixed rate for the length of the regulatory period – which Jemena does when seeking to hedge the base rate rate on the day benchmark.

Jemena does not need to make any significant change to its debt management practice to replicate (or hedge) the hybrid benchmark. Jemena's risk free rate hedging activities stay unchanged. Although Jemena will need to align the refinancing timing of its debt to align with the trailing average of the DRP somewhat, this alignment will reduce basis risk on the debt risk premium relative to current practice.

A move to the trailing average benchmark is problematic for Jemena

Section 6.1 describes the problems Jemena would face implementing the trailing average benchmark.

As noted there, this benchmark is problematic for smaller NSPs (like Jemena) that have lumpy debt portfolios because capital markets do not support smaller debt issues that are below a minimum benchmark issue size in different capital markets. This suggests that Jemena will struggle to rebalance its portfolio to exactly match that assumed in the benchmark – and so cannot benefit from the 'perfect hedge'

[41] Jemena considers that its detailed debt refinancing explanation is commercial in confidence as it may affect its ability to raise debt and hedge financial risks if made public.

suggested by the AER.[42] This problem is even worse if JGN and JEN are considered separately rather than as part of the Jemena group, as they would be in the upcoming round of price reviews.

Two elements are needed to manage this benchmark:

(1) Assuming a 10 year averaging period, 10 per cent of the total debt portfolio must mature each year, and

(2) Within a given year, either the 10 per cent of debt maturing is refinanced evenly across the averaging period used for that year or derivatives somehow mimic this.

Both of these elements are difficult to meet for a small debt portfolio, such as the $2.3 billion in regulatory debt assumed for JGN and JEN combined (see section 2.3.1).

Under element (1), JGN and JEN would need to have $230 million of their combined debt (or $160 million and $67 million separately) maturing each year – which would be hard to place. There is also a risk that an issue of this size may not meet the minimum benchmark trade size.

Under element (2), Jemena would need to hedge the base rate of the $230 million in debt issued each year to match that calculated as part of the cost of debt benchmark. Splitting this size into smaller issues would be inefficient and in some cases impossible due to minimum benchmark sizes. The derivative transactions needed to hedge the base rate depend on how the benchmark is calculated.

If calculated using data from every business day over the 10 year averaging period, then this would require Jemena to enter very small value (e.g. less than $1 million) derivative transactions almost every day of the year to hedge. In many cases, no derivatives exist to do this and banks (and other derivative counterparties) would unlikely offer deals so small.

If the benchmark was instead calculated using, say, four evenly spaced months of the year, then hedging would involve fewer transactions with lower administrative costs, but the concern that no derivatives exist to do this remains.

Collectively, both elements (1) and (2) require Jemena to restructure its debt and enter a range of derivative transactions to hedge the benchmark. Our biggest concern is that this is untested with our banks, investors and rating agencies. We are unsure how capital markets would react, nor what our financing costs would look like.

[42] AER, *Rate of return guidelines – consultation paper*, 10 May 2013, p. 110.

Given this uncertainty, we would caution the AER against forcing small NSPs like Jemena to move to the trailing average benchmark without ensuring the ability to hedge it, understanding the costs and risks of doing so, and fully exploring the impact on capital markets.

Appendix B Volatility analysis

Key points:

- Analysing the historical relationships between cost of debt components during different periods helps us understand the volatility of the three benchmarks.
- We find:
  - a positive relationship between the spot cost of debt and the spread to the 10 year swap rate, although this is stronger post GFC
  - a strong positive relationship between the cost of debt and 10 year CGS yields
  - a strong positive relationship between the credit spread over 10 year swaps and 10 year CGS yields over before, after and during the GFC
  - no clear relationship between the 10 year bond-swap spread and CGS yields during and after the GFC, but there was a positive relationship before.
- Overall, these show that the hybrid approach is likely to have less volatility than the rate on the day benchmark, but more than the trailing average.

Analysing relationships between variables

Overview and findings

This appendix analyses the relationships between the key variables that drive the cost of debt estimate and its volatility.

Importantly, the expected relative volatility of the allowance under the different benchmarks depends on the extent to which movements in the DRP and base interest rates move together or in opposite directions. Our analysis tests those movements using four polar cases that explore four different relationships.

Case 1: The spot cost of debt varies because of changes in the credit margin over swaps (all else is constant)

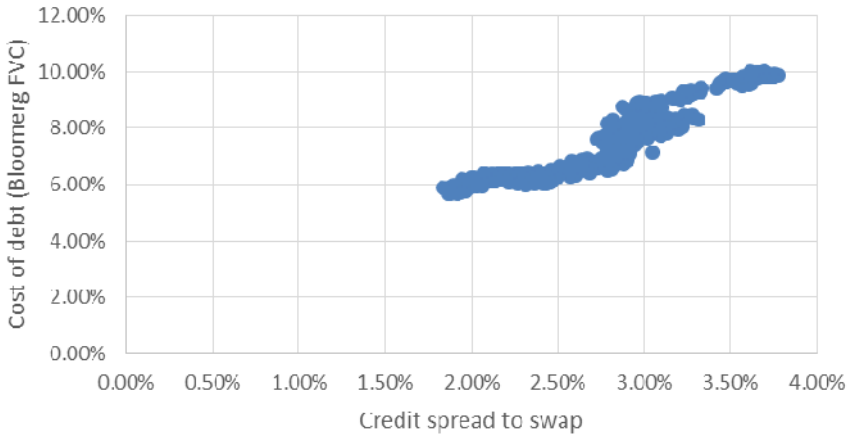
In this case, the spot cost of debt varies because of changes in the credit spread over swap (all else is constant).

The hybrid and trailing average will reduce volatility to the same degree, and both are (equally) better at reducing volatility compared to using the spot rate – which

can be demonstrated by examining the relationship between the cost of debt and the credit margin over swap, which we have done in the next three figures.

Figure B-1 shows that in the period from 2011 (i.e. post GFC) the cost of debt was positively related to the spread to the 10 year swap curve. The correlation coefficient is 0.94, and the slope of this relationship was 2.51 – meaning that a 1 per cent shift in the spread to swap is associated with a 2.51 per cent change in the cost of debt.

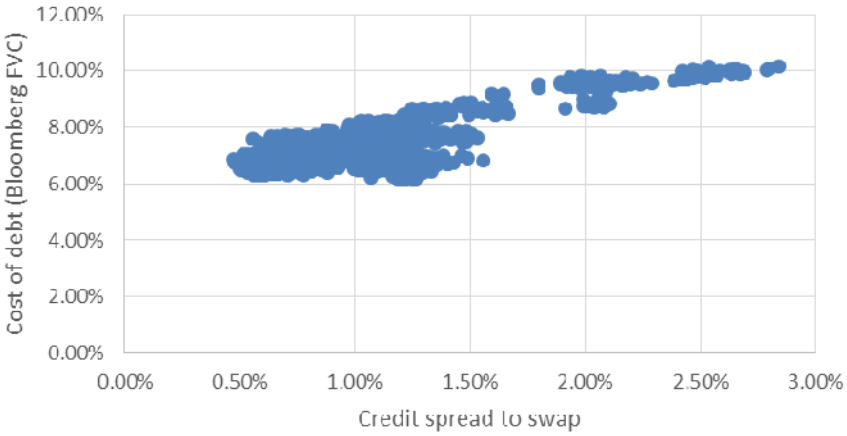
Figure B-1: Cost of debt versus credit spread to swap (2011–13).



Source: Bloomberg data, Jemena analysis.

The relationship between the cost of debt and the credit spread was similarly positive in the period prior to the GFC. Figure B-2 shows the relationship between 2001 and August 2008. The slope coefficient was 1.58 – meaning that a 1 per cent shift in the spread to swap is associated with a 1.58 per cent change in the cost of debt – and the correlation coefficient was 0.81. This is a relatively similar relationship to the one that has been seen since 2011, and indicates that there is a strong relationship between these variables.

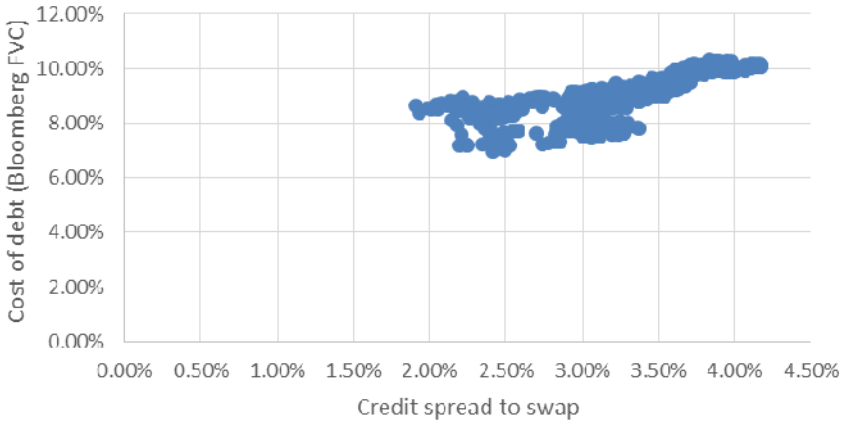
Figure B-2: Cost of debt versus credit spread to swap (2001–08).



Source: Bloomberg data, Jemena analysis.

Figure B-3 shows the relationship between credit spread and cost of debt that existed during the GFC. Again we find that the relationship was strong (correlation of 0.84), and the slope coefficient was 1.50, which was similar to the situation prior to the GFC. That is, a 1 per cent shift in the spread to swap was associated with a 1.5 per cent change in the cost of debt.

Figure B-3: Cost of debt versus credit spread to swap (2008–10).



Source: Bloomberg data, Jemena analysis.

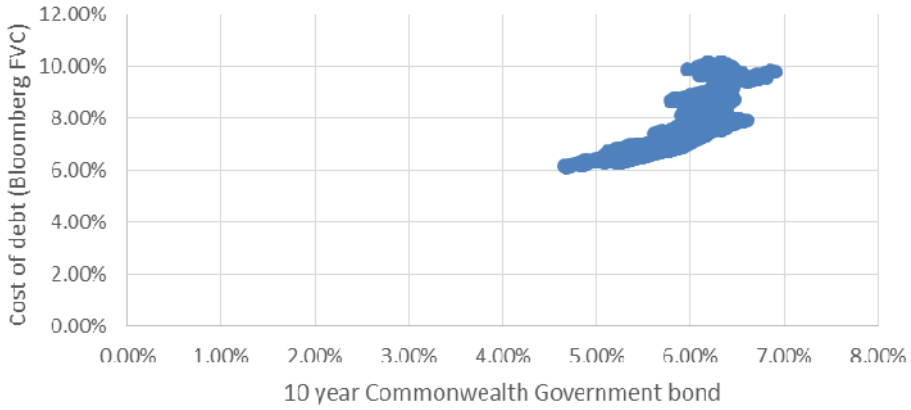
Case 2: The spot cost of debt varies because of changes in bond rates / swap rates (bond-swap spread constant)

In this case, the cost of debt varies because of changes in bond rates / swap rates, and the bond-swap spread is constant.

The empirical question is whether the spot cost of debt varies because of changes in bond rates. If this is the case, then the spot cost of debt and hybrid cost of debt will move together, and will have the same volatility, but the trailing average will be smoother. As shown below, we found this to be the case over all three of the sub-periods.

Figure B-4 shows that for the period prior to the GFC there was a tight positive relationship between the level of the 10 year Government bond and the 10 year Bloomberg fair value curve. The correlation coefficient was 0.81 and the slope of the regression line was 1.72, indicating that a 1 per cent change in the Commonwealth bond yield was associated with a 1.72 per cent change in the cost of debt.

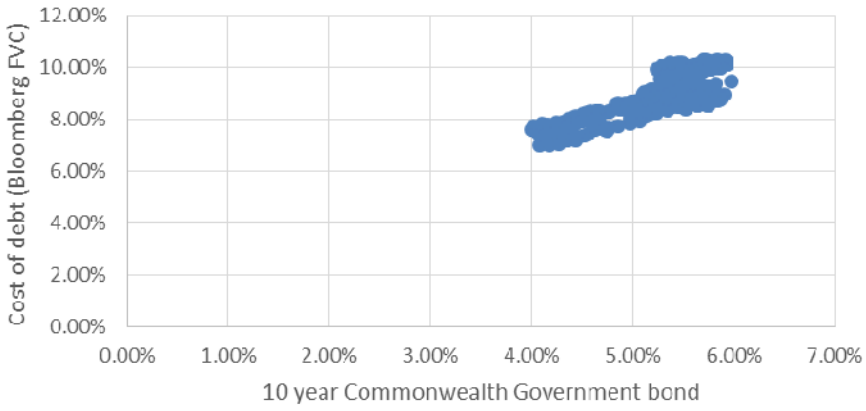
Figure B-4: Cost of debt versus 10 year CGS yields (2001–08).



Source: Bloomberg data, Jemena analysis.

Figure B-5 shows the situation during the GFC (2008-2010) was not very different from the earlier period in terms of the relationship between the Commonwealth Government bonds and the cost of debt. The correlation coefficient is slightly higher at 0.84, and the slope coefficient is a bit lower at 1.45.

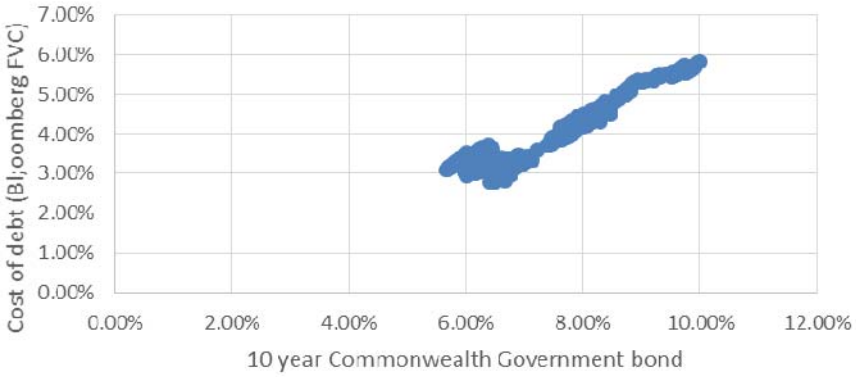
Figure B-5: Cost of debt versus 10 year CGS yields (2008–10).



Source: Bloomberg data, Jemena analysis.

The situation in the post GFC period has again shown a positive relationship between Commonwealth Government bond yields and the cost of debt (see Figure B-6). The correlation coefficient is higher still, at 0.96, and the slope coefficient is 1.36. In summary, while the slope coefficient has come down slightly since the period before the GFC, it is still very high and there is a strong relationship between the variables.

Figure B-6: Cost of debt versus 10 year CGS yields (2011–13).



Source: Bloomberg data, Jemena analysis.

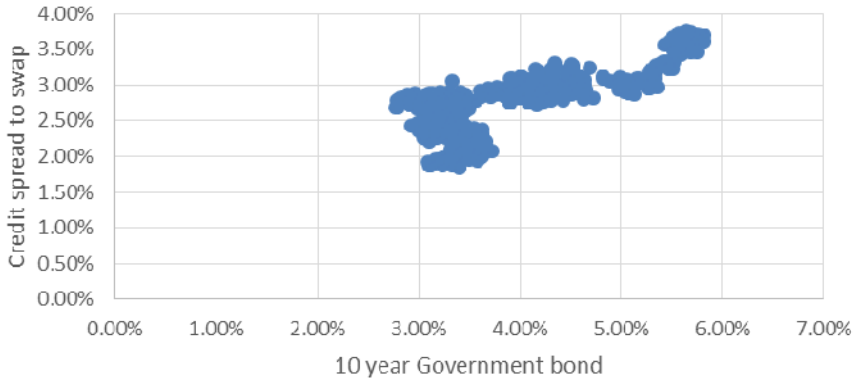
Case 3: The spot cost of debt remains constant but there is a perfectly offsetting change in the bond rate and the margin over swap (bond-swap spread constant)

In this case, the cost of debt remains constant, but there is a perfectly offsetting change (i.e. a negative relationship) between the bond rate and the margin over swap (bond-swap spread constant). Here, the hybrid benchmark would induce volatility that is not present in the rate on the day or trailing average benchmarks.

However, the situation where the credit spread over swap is consistently offset by a drop in the Government bond rate is unlikely, as we show below. We explore whether such a relationship actually exists by looking at daily Bloomberg data over the period from 2001 to 2013, and breaking the period down into the pre-GFC, GFC, and post-GFC cases.

Figure B-7 shows the post-GFC period from 2011 to 2013. The slope of this relationship is positive (slope coefficient 1.55) and the correlation coefficient is 0.82.

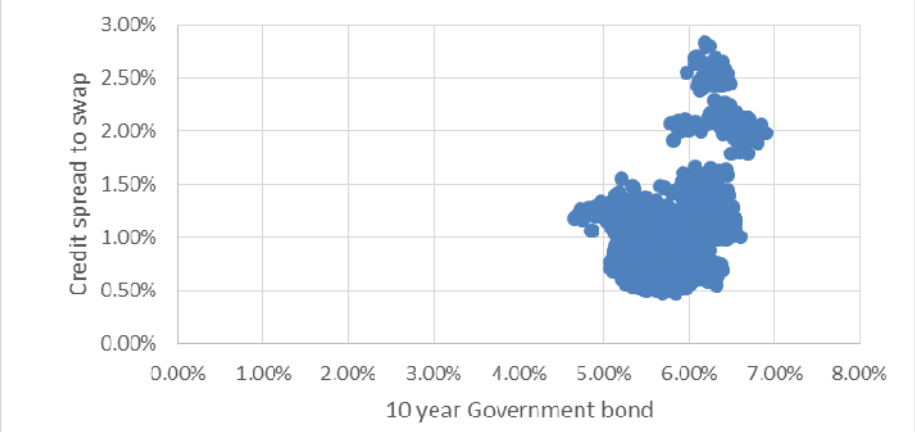
Figure B-7: Credit spreads to swaps versus 10 year CGS yields (2011–13).



Source: Bloomberg data, Jemena analysis.

The situation that existed prior to the GFC is shown in Figure B-8 (which is for the period from 2001 to 2008). During this period the positive correlation between the credit spread and the Government bond rate (i.e. CGS yield) was not as strong as it has been in the post GFC period, and the slope coefficient of 0.35 is smaller.

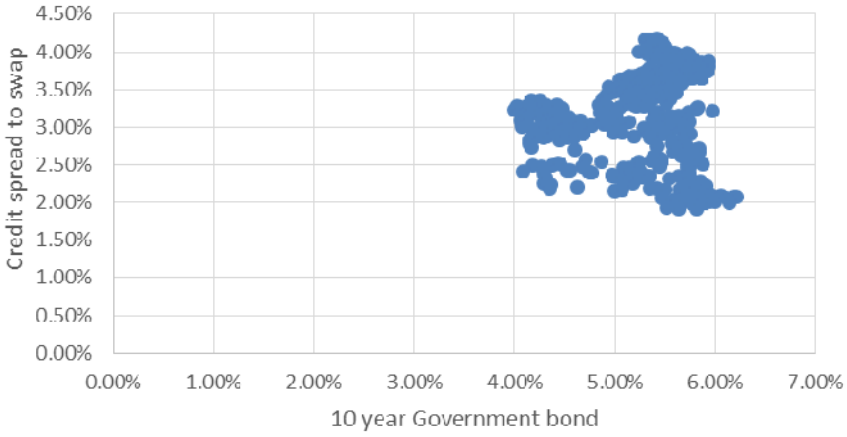
Figure B-8: Credit spread to swap versus CGS yield (2001–08).



Source: Bloomberg data, Jemena analysis.

The positive relationship between credit spread and Government bond rates also existed during the GFC, as shown in Figure B-9. The slope coefficient was only slightly lower at 0.37, and the correlation coefficient was 0.46. These results show that in all three periods, there has been a positive relationship between the credit spread and the 10 year Commonwealth bond rate.

Figure B-9: Credit spread to swap versus CGS yield (2008–10).



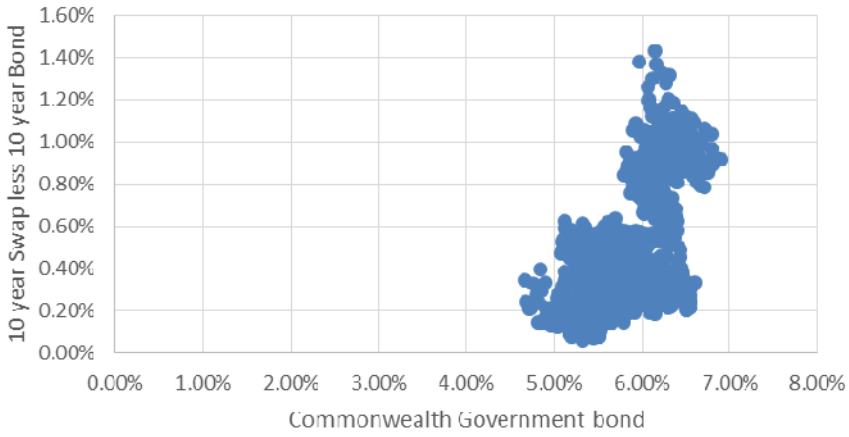
Source: Bloomberg data, Jemena analysis.

Case 4: The spot cost of debt remains constant but there is a perfectly offsetting change in the bond rate and the bond-swap spread (i.e., the margin over swap is constant, and changes in the bond rate are offset by changes in the bond-swap spread)

In this case, the cost of debt remains constant, but there is a perfectly offsetting change between the bond rate and the bond-swap spread – that is, the margin over swap is constant and changes in the bond rate are offset by changes in the bond-swap spread.

In this case all three benchmarks would result in a constant allowance. In the figures below we show that there is no perfect offsetting change between the bond rate and the bond-swap spread. Figure B-10 shows that in the pre-GFC period (2001–2008) the slope coefficient was positive and relatively high, at 0.30.

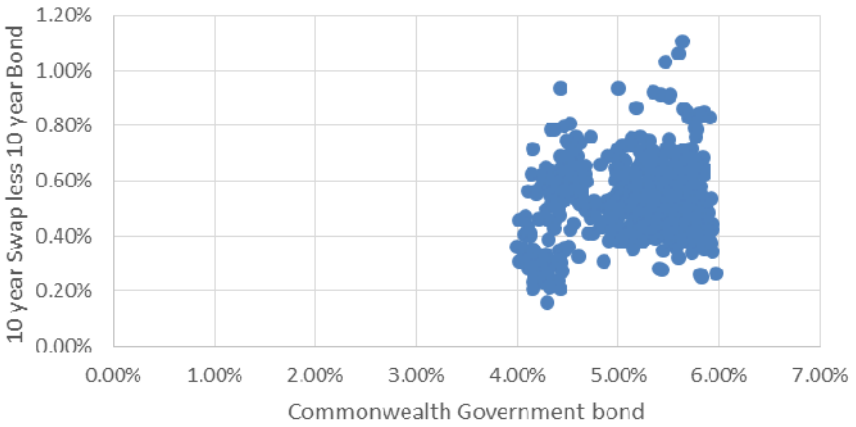
Figure B-10: 10 year swap less 10 CGS yield versus CGS yield (2001–08).



Source: Bloomberg data, Jemena analysis.

The situation during the GFC is shown in Figure B-11, where the slope coefficient is found to be only 0.06, which is essentially flat (i.e. there is no relationship to speak of).

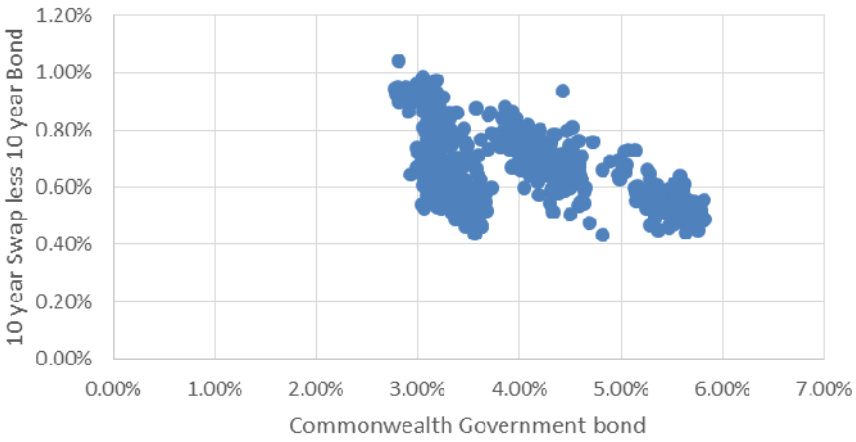
Figure B-11: 10 year swap less 10 CGS yield versus CGS yield (2008–10).



Source: Bloomberg data, Jemena analysis.

Similarly, in the period since the GFC, which is shown in Figure B-12, we found that the slope coefficient is -0.07, which while negative, is also very flat (i.e. there is no strong relationship).

Figure B-12: 10 year swap less 10 CGS yield versus CGS yield (2011–13).



Source: Bloomberg data, Jemena analysis.

Appendix C Memo on future hedging costs

Submitted by SP AusNet, Jemena, SA Power Networks/ CitiPower/ Powercor to the AER on 19 March 2013

Cost of Debt – Future Hedging Costs

Joint Memo (SP AusNet, Jemena, SA Power Networks/ CitiPower/ Powercor)

Introduction

This memo is submitted in response to TCorp's comments on hedging costs made during the AER's cost of debt workshop held on 26 February 2013. These comments referred to future cost increases of interest rate swaps and the implications for businesses that currently hedge the risk free rate during the regulatory period. An article in KangaNews ('A heavy cross to bear', July/August 2012) was referred to.

This memo outlines the reasons why SP AusNet, Jemena and SA Power Networks/CitiPower/Powercor ('the businesses') consider these comments have little bearing on the efficiency of the hybrid approach to estimating the benchmark cost of debt[1]. The businesses currently adopt this approach to debt management and consider that any increase in the cost of interest rate swaps due to the factors cited by TCorp will not be significant enough to mitigate the benefits of this approach.

KangaNews Article

1. Relevance

The article specifically discusses developments in the cross-currency swap market. However, it is interest rate swaps that are used to hedge the risk free rate in the hybrid approach, and therefore it is the cost of interest rate swaps that is relevant to this approach to debt management. Cross-currency swaps can be used by businesses to hedge against the exchange rate risk of issuing debt overseas. These may be used regardless of which of the three debt management approaches (trailing average, on the day or hybrid) a given business adopts.

While some of the issues raised in the article may have implications for interest rate swaps (see the section below), they should not be assumed to apply in the same way, or to the same degree, as to cross-currency swaps.

In addition, the sources quoted in the article are limited to a small number of banks (Westpac, Commonwealth Bank of Australia, Deutsche Bank and HSBC). Therefore the credibility of the article is questionable, as it is in the banks' interests to draw attention to potential cost drivers as means of justifying price increases.

[1] The approach put forward during the AEMC's Rule Change consultation by SA Power Networks/ CitiPower/ Powercor

The article is also speculative and lacks any hard evidence based on quantitative analysis. Indeed, the Westpac source acknowledges that different banks are interpreting the recent changes in different ways, which results in a varied impact on swap prices.

2. Content

Factors cited as driving up costs of cross-currency swaps include:

(i) Basel III

The impact of Basel III on interest rate swap costs in Australia is uncertain. In particular, it is yet to be seen whether the Australian Prudential Regulation Authority (APRA) will mirror changes made by the Basel Committee in January 2013. In addition, the extent to which banks will pass on any cost increases is not clear, and is likely to differ between clients.

(ii) Over The Counter (OTC) Reforms

In 2009 G20 jurisdictions committed to reform OTC derivatives market regulation. These commitments included requiring swaps currently traded over the counter to be cleared through central counterparties and reporting OTC derivatives to trade repositories. Various related legislation has since been passed in overseas jurisdictions, including the US in 2010 (Dodd-Frank Act) and the European Union in 2012. However, no single jurisdiction has yet fully met these commitments. The Australian Treasury does not currently mandate central clearing but reserves the right to mandate it in future and is currently consulting on the proposed approach for implementing the G20 commitments. It is therefore not clear if, when and in what form (including any thresholds and exemptions that will apply) additional regulations will be imposed in Australia.

Cross-currency swap prices are expected to rise by more than interest rate swap prices as a result of the Basel III and OTC reforms. Cross-currency swaps are much more credit intensive[2], and therefore banks will be required to hold more capital against these derivatives than for interest rate swaps. In addition, the implementation of new regulations in international jurisdictions such as the United States and the United Kingdom is occurring at a faster pace than in Australia

In an Australian Financial Review article ('Derivatives pricing gets complicated', 13 December 2012), Deloitte estimates that interest rate swap prices will rise by 0.05 to 0.15% per annum, while cross-currency swap prices are expected to increase by 0.1 to 0.3% per annum (presumably this only applies for the transition period over which the regulatory changes will be phased in). An increase in the cost of interest rate swaps of this magnitude

[2] Specifically, most cross-currency swaps require counterparties to exchange of principal amounts denominated in different currencies at maturity, while interest rate swaps do not. This requirement adds counterparty risk to cross-currency swaps that do not exist for interest rate swaps.

is not material enough to justify changes to the current debt management practices that the businesses use.

Businesses' Experience and Views

The businesses have raised the factors outlined above with a number of their financing banks and the strong consensus confirms that there is likely to be an impact on cross currency swaps (but not as significant as the KangaNews article implies) and that the impact on interest rate swap prices is expected to be limited to a few basis points at the most. The estimated increase provided by Deloitte (above) is expected to be at the high end of the likely range.

Considering a wide range of banks for supplying swaps ensures competition and mitigates potential price increases. This is especially true given that different banks interpret changes in different ways (as put forward by Westpac in the KangaNews article).

Any increase in interest rate swap transaction costs is unlikely to be material in the context of overall financing, and should not be sufficient to change the current (hybrid) debt management approach, or to imply that this approach is inefficient.

Conclusion

Finance markets are not static; there will always be changes in market conditions that impact on the costs of debt management, including swap prices. However, the factors cited in Kanga article will not foreseeably impact the businesses' current approach to debt management.

Therefore, while the KangaNews article contributes to the discussion of these issues, it does not support the position that the hybrid approach is inefficient, or is likely to be in the future.