

Analysis of the Australian Energy Regulator's  
assessment of the Debt Risk Premium in its  
Draft Decision on price controls for the period  
2010/11 to 2015/16 for the Victorian electricity  
distributors

A report to the Energy Users Association of Australia

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**13 August 2010**

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## 1 Introduction

This paper argues that the AER's proposed Debt Risk Premium (DRP) in its Draft Decision for Victorian distributors' price cap is too high and inconsistent with the intent of the National Electricity Objective (NEO).

The paper starts with an explanation of why it is important to set the DRP at the right level. It then examines what the Rules require the AER to do, what the distributors proposed and what the AER has decided so far. This leads to the key section of the paper: evidence that the rate is too high. This is followed by an explanation of why we think the wrong rate has been set and finally some suggestions on how the issue may be resolved.

## 2 Why does the level of the DRP matter?

The DRP is a premium above the risk free rate that lenders require in order to accept the risk of default on their loans to businesses, in this case the Victorian electricity distributors. In setting this rate the AER needs to find a balance between:

- the desire of distributors to maximise profits (the DRP has a significant impact on profits); and
- the interests of electricity consumers in ensuring the distributors meet their service reliability standards at the lowest possible cost.

If the DRP is set too low, it will undermine the ability of distributors to attract capital. Of course this matters a great deal – energy users value reliable supply highly and would not want distributors to avoid investment because they can not fund it. But on the other hand, if the DRP is set too high, it will mean that consumers will be paying higher prices than they should. The windfall revenue that results from the excessively high DRP is captured by the distributors' shareholders – they do not incur any effort or expense to win it.

Changes in the DRP can have a significant impact on electricity prices. Applying the methodology proposed in this paper would result in a DRP of around 120 basis points compared with the AER's proposed 325 basis points. The AER's proposed DRP will result in the revenues and prices of Victoria's distributors being \$564m<sup>1</sup> and 7.6% higher than they should be. This additional revenue will be captured by the shareholders of these businesses as windfall profit.

The significance of a regulatory error in setting the DRP can be contrasted with the significance of errors in setting capex allowances. Under the price cap regulatory regime that applies to the Victorian distributors, users typically retain 70% of the benefit if distributors spend less than their regulatory allowances, while shareholders

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<sup>1</sup> Excluding income taxes payable to the Commonwealth Government.

retain the remaining 30%<sup>2</sup>. The size of a hypothetical regulatory error in the distributors' capex allowance - whose effect will be to deliver to the distributors' shareholders a benefit equivalent to \$0.56bn - is therefore \$0.56bn/30% or more than \$1.9bn. This is around half the amount that the AER has proposed as the total capex allowance for the distributors, in its draft decision. Setting a DRP that is too high, therefore has the same impact to users (and distributors' shareholders) as would occur if the capex allowance was around 50% higher than what the AER has proposed. These numbers illustrate the importance of the DRP to users.

### **3 What does the Law and the Rules require in setting the DRP?**

The NEO as set out in Section 7 of the National Electricity Law (NEL) provides the over-arching guidance that the AER should have regard to in setting the DRP.

The objective of the NEL is to promote efficient investment and operation in electricity services, to serve the "long-term interests of consumers of electricity" with respect to price (and also several other factors). Setting the DRP too high will deliver windfall profits. This contravenes the NEO since it does not serve the long term interests of consumers. It may also reduce efficiency by stimulating inefficient over-investment by distribution network service providers if they respond to overly generous allowed rates of return by "gold-plating".<sup>3</sup> The "correct" level of the DRP (under the NEL) is therefore an issue of both equity and efficiency. To take account of both of these factors, in the rest of this paper we refer to the "correct" level of the DRP as the "appropriate" level of the DRP.

The National Electricity Rules (NER) in Clause 6.5.2(e) provides a specific definition of the DRP as:

*"... the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk free rate and a credit rating from a recognised credit rating agency"*.

A number of things should be noted from this:

- the maturity for the derivation of the nominal risk free rate is 10 years, so the benchmark that the Rules require for setting the DRP should be based on bonds that are redeemed in 10 years time;

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<sup>2</sup> The actual distribution of benefits between users and shareholders will depend on the year in which the underspending occurs, on the age of the assets and on the difference between the allowed rate of return and the distributors' cost of capital.

<sup>3</sup> We recognise also that setting the DRP too low will contravene the NEO as it may contribute to inefficient under-investment and through this reduced reliability, quality and security of supply.

- the credit rating that the AER has recommended in its Statement of Regulatory Intent (SORI) is BBB+;
- the requirement is for a rate that is “observed” not calculated or inferred;
- the requirement is for a benchmark based on Australian corporate bonds – i.e. bonds issued and traded in Australia;
- the term “bond” is not defined. Specifically there is no requirement that bonds be traded in secondary markets either through intermediaries or through organised exchanges. In light of this, debt instruments that have the financial structure of bonds such as corporate debt (i.e. periodic payment of a coupon with redemption on a specific date), is akin to a bond and could be included in the calculation of the benchmark.

While this is the specific requirement in the Rules in relation to setting the DRP, there are several other clauses in the Rules that should be taken into account in calculating the DRP.

Clauses 6.5.4 relates to the requirements on the AER in its periodic review of the rate of return. This review – which results in the SORI - is required to be undertaken every five years. The SORI is not determinative of parameters in price control decisions but the Rules require “*persuasive evidence justifying a departure, in the particular case, from a value, method or credit rating level set in the statement.*”

There is no specific requirement in the SORI on the DRP other than that the SORI is required to recommend the credit rating of debt that is used to set the benchmark which the AER is required to rely on in setting the DRP.

Other clauses in the Rules that provide useful guidance on the DRP are:

- Clause 6.5.4 (e) (2) requires that the return on debt should reflect “*the current cost of borrowings for comparable debt*”;
- Clause 6.5.4. (e) (4) (1) requires that “*where the credit rating levels ... can not be determined with certainty the AER must have regard to the need to achieve an outcome that is consistent with the National Electricity Objective*”.

## 4 What did the distributors propose?

The distributors proposed that the DRP should be 471 bps. This was based on a report prepared by PricewaterhouseCoopers (PwC). PwC state that they calculated this using Bloomberg’s seven year BBB rate fair yield curve for 15 trading days in October 2009 – as instructed by their clients - which was then extrapolated using Bloomberg data to calculate the 10 year DRP.

PwC’s terms of reference were to test whether Bloomberg’s fair value curve could be relied upon to determine the risk free rate. PwC were not instructed to, and neither did they, examine the actual “observed” cost of debt issued by any of the distributors either in the form of bank loans or on international bond markets.

## **5 What has the AER proposed in the Draft Decision?**

The AER has proposed a DRP of 325 bps. It was based on a benchmark constructed from the fair value yield based on bonds issued by Coles-Myer, Snowy Hydro, Santos, GPT and Wesfarmers in the 15 trading day period ending 19 March 2010 – coinciding with the period for the determination of the risk free rate. The values of the fair yield for these bonds (as compiled by CBA Spectrum) were then extrapolated using a “proxy” extrapolation method (i.e. using the spread between Bloomberg’s AAA seven and ten year fair value estimates).

The AER suggests that CBA Spectrum data of the fair yield curve for these bonds is more reliable than the Bloomberg data. They based this on a comparative analysis of the fair yield estimates of both Bloomberg and CBA, against market data relevant to the benchmark corporate bond over the indicative averaging period of 15 days ended 19 March 2010. The AER rejected PwC’s advice that Bloomberg data was the best available. They also rejected PwC’s extrapolations.

## **6 Is the AER’s proposed DRP supported by the evidence?**

The distributors and the AER have relied upon fair yield curves apparently compiled by the Bloomberg and CBA Spectrum. These curves were then extrapolated to 10 years in various ways. We researched the origins and specification of these fair yield curves, and could find no clear specification for them. We discussed them with financial analysts who shared our concern about the reliability of the information provided by these curves, particularly in the recent past when local debt markets have become highly illiquid.

We note at several points later in this document that the distributors, the AER and their consultants have questioned the reliability of these curves for the purpose to which the AER has put them. In view of this, we have examined the evidence of the actual cost of debt in recent transactions, and wider regulatory precedent, to test the AER’s proposals. This analysis is set out in this section. It suggests that the AER’s Draft Decision DRP of 325 bps is well above the observed DRP, and the precedent set in numerous previous regulatory decisions.

### **6.1 Evidence of the actual cost of debt**

Relevant details of seven recent domestic senior corporate debt transactions by a number of Victorian distributors or their parent companies are summarised in Table 1 below. The fourth column (cost of debt) is the 90-day Bank Bill Swap Rate (BBSW) that applied at the time that the loan was made plus the margins on those loans. In the last column we have then expressed the DRP as the difference between this estimate of the

cost of debt and the AER's determination of the risk free rate.<sup>4</sup> This is the definition of the DRP in the Rules. The last column shows that the DRP calculated in this way for the transactions shown in this table have ranged between -1 basis point to 108 bps, and the average level is 36 bps points.

It should be noted that the period of time covered in Table 1 corresponds to the period of the Global Financial Crisis (GFC), a period of time during which the RBA noted " ... the deterioration of credit market conditions and the failure of several institutions saw corporate debt yields increase significantly ..." <sup>5</sup>

It should also be noted that the risk free rate has varied, from the values that the AER has calculated in its Draft Decision. For example, the risk free rates in the decision for the Queensland distributors was 5.64%, and the New South Wales distributors was 5.82%. We are not suggesting that the AER has proposed the wrong risk free rates in its Victorian draft decision, but note that if the risk free rates in the Queensland or New South Wales decisions were to apply in the Victorian decision, the margin over the risk free rate (i.e. the DRP) would be even lower than the values in Table 1.

**Table 1<sup>6</sup>. Actual cost of debt for Victorian distributors**

Date	Company	Term (years)	Cost of debt (%)	Implied DRP (basis points)
5-Feb-10	SPN	5.5	5.64	-1
4-Jun-09	SPN	3	5.69	4
7-May-09	SPN	3	5.69	4
29-Apr-09	DBP (DUET)	3	6.28	63
29-Apr-09	DUET	5	6.73	108
25-Mar-09	DUET	3	5.98	33
9-Dec-08	DUET & SPN	5	6.35	70
10-Nov-08	Spark	2/3	5.73	7.5
Average				36

(Data sources: Credit Suisse, 8 February 2010, Equity Research, "SP Ausnet" Table 2; Average monthly 90 day BBSW from [www.FIIG.com.au](http://www.FIIG.com.au); risk free rate from AER Draft Decision).

In addition to these transactions, in June 2008 Spark Infrastructure refinanced \$200 million of debt at a margin of 105 bps. Translated into a DRP on the risk free rate in the

<sup>4</sup> For the sake of brevity, the risk free rate that the AER is likely to have determined at the date that each loan was issued will vary from the values in this column (which are based on the AER's determination of the risk free rate in the Draft Decision). However, over the period of time covered in this table - particularly around the peak of the GFC at the start of 2009 - the risk free rate was higher than the value in the penultimate column. As such, the average premium that we have calculated is likely to *overestimate* the average DRP that would be calculated based on the 10 year risk free rates that applied when the loans were issued.

<sup>5</sup> RBA Statement on Monetary policy, 10 November 2008.

<sup>6</sup> SPN refers to SP Ausnet, Spark refers to Spark Infrastructure and DUET refers to Diversified Utility and Energy Trust

same way as in Table 1, this is a margin of just 10 basis points. In his 2008 Shareholder Review, the CEO of Spark Infrastructure described this capital raising as “*pleasing in the context of current credit markets*”.<sup>7</sup>

Once the worst effects of the GFC had abated, Victorian distributors again accessed international bond markets, presumably in part at least because they could obtain capital even more cheaply than they had from Australian banks during the GFC. One example of this is a CHF475m bond raised by SPN on 5 February 2010. This issue was executed at a margin of +65bps above the prevailing rate. Once swapped back to Australian dollars it was equivalent to BBSW +152bps<sup>8</sup>. Expressed as a premium (the DRP) over the risk free rate that the AER has set, this is 1 basis point **below** the risk free rate. The Chief Financial Officer of SP Ausnet said that this result “*again demonstrated our ability to access competitively priced debt and to diversify our sources of funding*”<sup>9</sup>.

More recently, on 15 July 2010, APT Pipelines, the financing subsidiary of APA Group, a BBB rate group, issued \$300m of 10 year bonds. These bonds were priced at 240 basis points above the Bank Bill Swap Rate. This is equivalent to a DRP – based on the AER’s assessment of the risk free rate of 5.65% - of 125 bps.

It should be noted that in the analysis to this point the implied DRP assumes that distributors remain exposed to short-term interest rates (i.e. the 90 day BBSW) for the term of their loan. However in most cases distributors swap their exposure to the BBSW for fixed rates. These swaps usually correspond to the term of their loans. So, for example, three-year loans will be hedged by swapping exposure to BBSW for three-year fixed rates.

Taking account of this, it is possible to derive an alternative estimate of the appropriate DRP as the fixed rates (corresponding to the loan term) plus the margins (over BBSW) that were paid for the loans. We have done this calculation using the mid-point of the bids and offers for fixed rates corresponding to the terms of the loans in Table 1. The overall average cost of debt using this approach, for all the loans in Table 1 is 7.02%. This compares to a cost of debt based on the AER’s draft decision of 8.9% (made up of a risk free rate of 5.65% and a debt risk margin of 325 basis points). The difference between the observed actual cost of debt (7.02%) and the AER’s proposed allowed cost of debt (8.9%) is 188 basis points. In other words, the calculation suggests a DRP based on the observed actual cost of debt of 137 basis points (325 bps as proposed by the AER less 188 bps).

Clearly, Australian electricity network providers have been able – even during the very peak of the GFC – to obtain capital easily and at margins very much lower than the AER has proposed for the next five years. This should not be surprising given that they are regulated utilities with a highly predictable cash flow.

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<sup>7</sup> “Message from the CEO”, 2008 Spark Infrastructure shareholder review.

<sup>8</sup> Credit Suisse, 8 February 2010, Equity Research, SP Ausnet

<sup>9</sup> “Open Briefing”, SP Ausnet, 13 May 2010, page 4.



The Rules (6.5.4) requires that the cost of borrowings should reflect the “*current cost of borrowings for comparable debt*”. An analysis of the actual cost of borrowings as described above provides strong evidence of what these “current cost of borrowings” are. These data on the actual cost of borrowing are consistent with a DRP significantly lower than that proposed by the AER.

## 6.2 Regulatory precedent

### 6.2.1 Ofgem

In its most recent distribution price control review (March 2010) in Britain, Ofgem decided on a cost of debt of 3.4%. Ofgem does not separately specify a risk free rate or a debt risk margin. However, Ofgem’s advisor, PricewaterhouseCoopers, suggested that a DRP of 120 to 150 bps is appropriate. The cost of debt that Ofgem proposed (towards the lower end of the range suggested by PwC) implies a DRP of around 120 bps. This is consistent with the level of the DRP that the ACCC and all jurisdictional regulators have historically decided (as noted below).<sup>10</sup>

There are other important differences in the approach that Ofgem (and its consultant PricewaterhouseCoopers) and the AER have taken. These differences are briefly summarised below and examined in more detail later in Section 6.

- PricewaterhouseCoopers (who also advised the Victorian distributors on the appropriate DRP) looked at three sources of information in assessing the cost of debt: general market data, utility-specific market data and utility-specific primary market evidence. As noted above the AER ignored utility-specific market data and utility-specific primary market evidence.
- Ofgem and its consultant focused on long-term debt costs (ten year average premia), rather than the estimates of debt costs over short periods of time (as the AER has done). Ofgem specifically said that there was no evidence that the recent turmoil in debt markets (referring to the GFC) justified a focus on “spot rates” (i.e. observations of the cost of debt at specific points in time) rather than long term average rates, and rejected the notion that there had been a fundamental shift in the cost of debt following the GFC. Ofgem said that the use of long-term averages is the most efficient way of reflecting the long-term cost of debt given the long-lived nature of the assets the debt is financing. By contrast the AER has proposed debt risk premiums that are around three times higher than the level decided in Australia by various regulators before the GFC (as discussed below), and that have been proposed by Ofgem since the GFC. By implication, the AER’s proposal concludes that the GFC has resulted in a permanent shift in the cost of debt – a conclusion as noted earlier that Ofgem rejects.

### 6.2.2 Australian regulatory precedent

Good regulatory practice requires that historic precedent is respected unless there is good reason not to do so. Table 2 shows the DRP in previous regulatory decisions in

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<sup>10</sup> Ofgem, December 2009. “Electricity Distribution Price Control Review Final Proposals – Allowed Revenues and Financial Issues”, page 10.

Australia and compares these to the AER's distribution decisions. This shows that the AER's decision on the DRP has been around three times higher than the DRPs arrived at in the many decisions made by the jurisdictional regulators and the ACCC.

**Table 2. Regulatory precedent on the DRP<sup>11</sup>**

Regulator (ACCC or jurisdictional regulator)	Date of Decision	DRP (basis points)
ACCC (transmission revenue control decisions)	From 1999 to 2004	90-100
Office of the Regulator General (electricity decision)	September 2000	150
IPART (last electricity distribution decision)	June 2004	100
QCA (last electricity distribution decision)	April 2005	109
ESC (last electricity distribution decision)	October 2006	142.5
ESCOSA (last electricity distribution decision)	April 2005	134
<b>AER Decisions</b>		
Powerlink	June 2007	114
Energex/Ergon	May 2010	330
Integral Energy, Country Energy, Energy Australia	January 2010	348-352

With regard to the relevance of the decisions of other regulators, the AER is obliged by the Rules (6.5.4 (e) (4) (ii)) to have persuasive evidence before changing various WACC parameters from the levels that have been previously adopted. The AER's first revenue/price control decision for Powerlink was consistent with the ACCC's decisions and other jurisdictional regulator decisions. However, for its distribution decisions (and the Transend decision) the AER has concluded that a DRP around three times higher than the levels set it had set in its Powerlink decision, the level set by the ACCC, all other Australian jurisdictional regulators and Ofgem, is appropriate.

Even leaving aside the specific requirements in the Rules to have regard to historic precedent, regulatory good practice suggests that the AER should explain such significant differences. We recognise that the AER has adopted similar methodologies and has used similar data sources as the jurisdictional regulators, in arriving at the DRP. The differences in the AER and jurisdictional regulators' decisions may or may not be explained by perceived differences in the debt risk premium in the Australian BBB+ bond market. Certainly as explained in the following sections there appears to be significant differences of opinion on just what the data is saying. Furthermore, evidence provided earlier in this section corroborates the view that whatever may have occurred to borrowing costs in the domestic bond markets, the actual cost of debt to the distributors even through the peak of the GFC varied little from its pre-GFC levels. For these reasons, we suggest that the AER has not presented persuasive evidence for such a significant departure from long-established precedents in Australia.

<sup>11</sup> All of the figures quoted in this paragraph have been taken from the relevant final decision documents which can be found on the websites of the various jurisdictional regulators.

## Summary

*The actual cost of debt of Victorian distributors, and the decisions of all other jurisdictional regulators in Australia and Ofgem in Britain provides compelling evidence that the AER's proposed DRP is too high.*

## 7 Why has the AER proposed a DRP that is too high?

The previous section provided evidence that the DRP proposed by the AER is too high. This section suggests that a reason for this lies with flaws in the Rule that the AER is required to implement to determine the DRP. However, notwithstanding this, we suggest that the AER can do more to work around these flaws, and the methodology that the AER has adopted so far does not do this. The next section sets out our suggestions on the evidence that the AER should have regard to in setting an appropriate DRP based on observed data and that is consistent with decisions by other regulators in Australia and the UK.

### 7.1 Clause 6.5.2 (e) of the Rules is flawed

We have several concerns with clause 6.5.2(e), the most specific clause on the calculation of the DRP:

1. The clause demands that the benchmark be based on the *Australian* benchmark corporate bond rate. However, we are unaware of a single bond that has been issued by any of the Victorian distributors in the Australian exchange traded market over the last regulatory period. Certainly neither the AER nor the distributors have pointed to any such bonds. The benchmark should be based on the markets where distributors actually raise capital and this means international bond markets as well as local bank debt markets, and possibly also bonds that are issued local but not exchange-traded. The Victorian distributors evidently agree with this noting in their submission on the Advanced Meter Interval decision that "... *it would also be instructive to examine the yields on long-dated BBB+ corporate bonds issued in more liquid overseas markets. The yields on corporate bonds observed in offshore markets (swapped into Australian dollars) provide a reasonable indication of the yields that would be expected to prevail in Australian domestic markets*".<sup>12</sup>
2. The requirement that the benchmark be based on bonds, appears to ignore Australian bank debt (i.e. debt issued to banks in Australia) which as far as we can discern from the balance sheets of publicly listed Victorian distributors, accounts for almost all the debt that they have issued to Australian domiciled lenders.

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<sup>12</sup> Victorian electricity distributors, June 2009. *Debt risk premium for use in the Initial AMI WACC period, a paper produced jointly by the Victorian electricity distributors*. Page 10.

3. The clause demands that the DRP be based on the bond rate for Australian bonds that have a maturity equal to that used to derive the nominal risk free rate, i.e. 10 years. This is difficult if not impossible to achieve. None of the Australian bonds that the AER has referred to have a 10 year maturity. The five bonds that the AER has selected in its benchmark have a maturity of between 9 months and 4.8 years from the time of the AER's Final Decision. We do note however, that since the AER's Draft Decision, APT has issued a 10 year bond in Australia.

In addition to these problems, the Australian non-bank bond market is a small, highly illiquid market. In small, illiquid markets it is difficult to establish fair values. This is indeed the case in the Australian BBB+ exchange traded bond market. For example the AER shows that in the nine months from May 2009 to March 2010, data provided by CBA Spectrum shows a DRP that is 300 bps higher than Bloomberg, but by March 2010, data provided by Bloomberg shows the DRP was 150 bps higher than CBA Spectrum<sup>13</sup>. If the prices in these markets could be established with any reasonable level of certainty, such large disparities would not arise.

The inappropriateness of the benchmark specified in the Rules is widely recognised. The Victorian distributors' advisor - PricewaterhouseCoopers - recommend that the AER consider other factors in assessing the DRP including adjusted floating rate bond data and term sheets of bank debt transactions<sup>14</sup>. The distributors themselves - in the context of the regulation for the Advanced Metering Infrastructure roll-out - rejected the use of the benchmark specified in the Rules and argued instead for a benchmark based on a Tabcorp bond.<sup>15</sup>

The AER too, albeit in rather more circumspect language, notes that it has "*had to place increasing reliance on data service providers, namely Bloomberg and CBA Spectrum, whose fair yield estimates have themselves been the subject of scrutiny in an environment where corroborating information is scarce*"<sup>16</sup>, and that "*this sample of bonds is the best possible in the current circumstances, where there are no BBB+ bonds with a maturity close to ten years*".<sup>17</sup>

## **7.2 The short averaging period for assessment of the DRP is not justified**

The AER has proposed that the DRP be observed over a narrow window of time, as close as possible to the time of the regulatory decision - corresponding to the window

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<sup>13</sup>Australian Energy Regulator, June 2010. *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, Figure 11.8, page 513.

<sup>14</sup> *Ibid*, page 508. AER Draft Decision

<sup>15</sup> See Victorian electricity distributors, June 2009. *Debt risk premium for use in the Initial AMI WACC period, a paper produced jointly by the Victorian electricity distributors*.

<sup>16</sup> Australian Energy Regulator, June 2010, *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, page 512.

<sup>17</sup> Australian Energy Regulator, June 2010, *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, page 515.

in time in which it determines the risk free rate<sup>18</sup>. The AER's choice of a narrow window to set the DRP could be seen as an innocuous choice but in reality it is significant. Its significance lies in the fact that by choosing a narrow window, the AER has tied itself into a specific methodology and specific data sources. The AER has thereby deprived itself of the ability to consider wider evidence.

We are not clear why the AER has chosen a short averaging period to establish the DRP, co-incident with the averaging period which it uses to establish the time to set the risk free rate. The AER is not required to do this in the Rules :

- Perhaps it was for apparent consistency – so that the DRP and risk free rate were determined based on observations at the same period in time?
- Perhaps the AER thought that observing the DRP as close to the start of the regulatory period as possible meant that it satisfies the Rule 6.5.4 (e) (1) for a “forward looking” rate of return?
- Perhaps, unlike some other cost of capital parameters, the AER considers that the DRP is observable and so it is possible to set it based on the apparent values as close to the start of the regulatory period as possible (by implication the AER would do this for all the other WACC parameters if only it could)?

As explained in the rest of this section, we do not think any of these reasons justify choosing a short averaging period for the assessment of the DRP. To the contrary there are good reasons why the DRP should be established over a longer period of time.

### **Consistency with the time period for setting the risk free rate is not meaningful**

The DRP is the premium that lenders require to compensate them for the risks that their borrowers may not be able to pay interest and redeem their loan when it is due. In the case of corporate bonds or senior corporate debt, the lenders are being compensated for accepting a defined tranche of corporate risks. In normal circumstances, such compensation may be expected to vary within a fairly narrow band over time, with variations reflecting changing perceptions of corporate risk, or changing dynamics in the markets in which such risks are priced and traded. Only very rarely, at times of extreme market crises (such as the GFC) can it be expected that the DRP will deviate significantly from its long-term average value. Even so, care needs to be taken before assuming that such deviations will apply also to regulated network service providers in Australia. The data in Table 1 suggests that the significant increases in the DRP in the Australian bond markets have not affected distributors' ability to raise debt capital cheaply and easily.

The DRP is the lenders' equivalent of the shareholders' market risk premium, which describes the compensation that equity providers require for accepting equity risks. The excellent analysis of the market risk premium by the AER's staff and consultants in the documentation that lead up to the SORI, is based on establishing estimates of the

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<sup>18</sup> For the draft decision this was the period from 1 to 16 March 2010.

market risk premium over time, never at a single point of time, or a short window of time. The AER established the market risk premium based on a long-term average, and specifically rejected market risk premiums proposed by the distributor's consultants on the basis that, inter alia, their proposed market risk premium was not consistent with long term historical averages.<sup>19</sup> If consistency is an important issue to the AER, then it seems to us that if the market risk premium is established as an average over a reasonable length of time, then the debt risk premium should be established in the same way – as an average over a reasonably long period of time.

Other regulators recognise this. In Britain, Ofgem uses 10 year trailing yields to establish the cost of debt. In its most recent price control decision for British distributors, Ofgem noted that *“the spot cost of debt has both risen, and fallen, sharply within a relatively short time period ... (but that) we continue to believe that long-term averages represent the most appropriate basis for setting the cost of debt. We do not think that there is any compelling evidence that the recent turmoil in the financial markets has made this any less appropriate or that there has been a fundamental shift in the cost of debt following the financial crisis”*.<sup>20</sup> Ofgem further noted that *“In setting a WACC for the industry, we think that the use of long-term averages is the most reasonable way of reflecting an efficient long term cost of debt given the long lived nature of the assets the debt is financing. Furthermore, long-term averages offer investors a greater degree of predictability of allowed returns beyond the five years of a price control”*.<sup>21</sup>

In Australia, the picture is mixed. To set the DRP, ESCOSA used a trailing average of data over a five-year period, IPART had regard to a variety of factors but made no mention of a narrow window in which it assessed the DRP. The ESC and QCA also examined a variety of factors including margins on recent loans, although they also examined the DRP in a narrow window of time. We also note that in 2009 the Australian Competition Tribunal agreed with the AER and applicants to an appeal of the determination of the risk free rate, that the DRP should be set based on the same averaging period.

Consistency is a significant factor in regulatory decision-making. However, we suggest there is a much stronger argument for consistency in the approach to the determination of the debt risk premium and market risk premium (i.e. the use of long term averages) than there is for consistency in the time period for establishing the risk free rate and the debt risk premium.

### **Setting the DRP close to the start of the regulatory period does not make it a forward-looking estimate**

Clause 6.5.4(e) (1) suggests that the allowed rate of return should be “forward looking”. The AER may argue that this justifies setting the DRP as close to the start of the

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<sup>19</sup> Australian Energy Regulator, June 2010, *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, page 503.

<sup>20</sup> Ofgem, December 2009. *Electricity Distribution Price Control Review – Allowed Revenues and Financial Issues*, Ref 147/09, page 9.

<sup>21</sup> *ibid.*

regulatory period as possible, as this provides the best estimate of the future DRP. However this argument rests on several assumptions, none of which hold:

- It assumes that the bonds included in the benchmark are all 10 year bonds whose yield to redemption reflects market perceptions of the risk of holding BBB+ bonds for 10 years. This assumption does not hold in the market in which the AER is establishing a benchmark – as noted earlier these bonds are redeemable as short as seven months ahead.
- Secondly, it assumes that the Australian BBB+ corporate bond market is an efficient market that always delivers a fair price that can be relied upon as a reasonable estimate of market participant's future expectations. However, this is not the case: as noted earlier during the peak of the GFC, at the beginning of 2009, using CBA Spectrum or Bloomberg estimates of fair yield for 10 year BBB+ bonds would have suggested a DRP of around 500 bps (Bloomberg) or around 1700 bps (CBA Spectrum).<sup>22</sup> It is unlikely that if the AER was making a price control decision at the peak of the GFC, it would have been prepared to accept that these (extreme) values should set the DRP for price controls.

For these reasons, we agree with the Australian Competition Tribunal that there is “*no virtue*” in setting the DRP “*at values that prevailed close to the start of the regulatory control period, or to the publication of a final determination*”.<sup>23</sup>

### **The DRP is not observable with certainty**

Even if it could be argued that the DRP should be observed during a narrow window of time before each decision, we suggest there are serious practical problems with this. We noted above that CBA Spectrum and Bloomberg's data produces estimates of the DRP that differ by 1200 bps. While it may be reasonable to expect that market analysts may differ to some degree, a difference of 1200 bps is clear evidence that the DRP can not be observed with certainty. We recognise that such large differences have been most visible during the GFC, although significant differences have persisted since then. More generally, however, the regulatory debate surrounding the AER's decisions on the DRP has been dominated by differences of opinion on whether Bloomberg or CBA Spectrum's analysis is more reliable than the other. At the very least what this

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<sup>22</sup> Based on the data presented Australian Energy Regulatory, April 2009. *Final decision: New South Wales distribution determination, 2009-10 to 2013-14*, Figure 11.1, page 226.

<sup>23</sup> The Australian Competition Tribunal (ACT) made this comment in ACompT8 (see page 29) in relation to the appeal by Energy Australia and others on the averaging period for the risk free rate. The ACT's statement that we quote referred to “those rates” intending to cover both the risk free rate and the corporate bond rate (and by implication the DRP). For completeness it should be noted that we agree with the ACT's assessment that there is no “special virtue” in setting the corporate bond rate close to the start of the regulatory period, but we do not agree with the ACT's assessment of this in relation to the risk free rate. The market for the establishment of the risk free rate (Commonwealth Government 10 year securities) is a far more liquid and stable market and is not subject to the same problems (illiquidity, unreliable pricing) as the Australian BBB+ corporate bond market. Therefore we have no issue with the AER's choice of short averaging periods close to the start of the regulatory period in setting the risk free rate.

illustrates quite clearly is that the DRP is not observable with certainty. Again, this only strengthens the argument for the assessment of the DRP, as an average over reasonable periods of time, not short intervals.

## Summary

The AER has not justified why it has chosen to set the DRP based on the value that is inferred during a narrow window of time close to the start of the regulatory period. We have suggested a number of possible reasons that the AER may allude to, to justify this decision. We suggest that these reasons provide little justification for the AER's approach.

## 8 Suggested next steps

This section outlines some changes that we believe the AER could consider to deal with the problems identified in this paper.

We suggest that the AER should be driven by the over-arching requirements of the National Electricity Objective and clause 6.5.4. This may result in outcomes that could deviate from the requirements of 6.5.2 (e) – just as what the AER has already done is, unavoidably, inconsistent with the 6.5.2 (e). The AER should then evaluate whether such deviations from 6.5.2 (e) meet the objectives of the NEO and the guidance provided by 6.5.4, better than its existing approach. This will deliver a result that can be respected for its integrity and consistency with good practice regulation. The rest of this section sets out specific suggestions.

- (i) Use a longer averaging period

The previous section suggested that part of the reason for the incorrect DRP lies with the AER's choice of a short averaging period to determine the DRP. This problem is easy to remedy: the AER is under no obligation to restrict itself as it has. By eliminating this voluntarily imposed constraint, the AER may consider wider evidence on what the appropriate rate might be.

- (ii) Look at the range of debt markets the distributors are actually using, which change over time

The AER has chosen a benchmark based on exchange-traded Australian non-bank BBB+ bonds. We accept that there is precedent for this: all the jurisdictional regulators had regard to this market, amongst others, in their consideration of the DRP. The choice of this market has not been controversial in the past – it delivered a consistent and predictable DRP of around 100 bps.

However in the wake of the GFC this no longer applied. The domestic bond market became illiquid. Australian network service providers abandoned the domestic bond market and instead raised capital through bank loans and on international capital markets. More recently the APT 10 year bond issue showed that network businesses



may be returning to the domestic bond market. APT's issue has been described as a "milestone" transaction in local capital markets that had been "dormant for years".<sup>24</sup>

In their submission on the SORI, the Joint Industry Association (representing network service providers) argued forcefully that in determining a benchmark credit rating (for network service providers) it is appropriate to consider the credit ratings for comparator businesses, which would include transmission and distribution businesses in both the electricity and gas industries.<sup>25</sup> The AER agreed with this (as do we) and only included network businesses<sup>26</sup> in its analysis of the appropriate credit rating to be used to establish the benchmark for the DRP<sup>27</sup>. Yet, none of these companies' debt has been included in the calculation of the benchmark. On the contrary the AER has based the DRP on the benchmark of BBB+ bonds issued by a supermarket company, a peaking generator/electricity retailer, a highly-leveraged property trust company, a coal, mining, industrial and supermarket conglomerate and an oil / gas explorer / LNG developer.

It might be argued that one BBB+ bond is indistinguishable from another on the basis that the credit rating agencies have filtered these bonds in the same way using the same metrics and therefore assessed such bonds as presenting comparable risk to their owners. But the data does not bear this presumption out. For example, CBA Spectrum's data shows that the DRP for Snowy Hydro's BBB+ bonds has been more than five times the DRP for Coles Myers' BBB+ bond<sup>28</sup>. Clearly, regardless of whatever the credit rating agencies may say about the risks of Coles Myer and Snowy Hydro bonds, their fair yield data shows that bond holders want to be paid a premium above the risk free rate that is five times higher for the one as the other. In the wake of the GFC, the choice of the Australian BBB+ bond market as the basis for a benchmark DRP can not be accepted unquestioningly, as it has to-date.

We suggest that the AER should consider wider evidence of the debt margins in the capital markets that the distributors actually participate in. This should include:

- The market for bank debt in Australia (Table 1 shows the results of several loans from Australian banks to Victorian distributors or their parent companies);
- The outcome of international bonds issued by Australian network service providers, swapped back into Australian dollars (as they typically are);
- An analysis of the term sheets of recently issued Australian bonds whether they be exchanged-traded or traded through brokers or other intermediaries.

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<sup>24</sup> Australian Financial Review, 16 July 2010.

<sup>25</sup> AER, December 2008. *Explanatory statement, Review of the WACC Parameters, Electricity transmission and distribution network service providers*. Page 272.

<sup>26</sup> Citipower Trust; Country Energy; Dampier Bunbury Natural Gas Pipeline Trust; Diversified Utility and Energy Trusts; ElectraNet Pty Ltd; Energy Australia; Energy Partnership (Gas) Pty Ltd (EPG); Envestra Ltd; Ergon Energy Corporation; ETSA Utilities; GasNet Australia (Operations) Pty Ltd; Integral Energy; Powercor Australia; Rowville Transmission Facility Pty Ltd; SPI PowerNet Pty Ltd; United Energy

<sup>27</sup> AER, December 2008. *Explanatory statement, Review of the WACC Parameters, Electricity transmission and distribution network service providers*. Page 272.

<sup>28</sup> Based on data in Australian Energy Regulator, June 2010, *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, Table 11.16, page 519.

Considering these matters is not necessarily inconsistent with Section 6.5.2 (e) of the Rules:

- On the first, while bank debt is not a “bond”, the Rule does not specify what a bond is, and the structure of bank debt (payment of a coupon and repayment of principal at termination date) is fundamentally the same financial structure as a conventional bond. Bank debt appears to be filling the same role (i.e. conventional senior corporate debt) as would a BBB+ bond, and as such is comparable. Furthermore, although bank debt may not be rated by a credit rating agency (as required under 6.5.2 (e)), Victorian distributors (or their parent companies) are rated by the credit rating agencies typically at the BBB or higher level, and it is to these corporations that the bank stakes its claim – in the same way that bond-holders would.
- On the second, several Victorian distributors are now understood to be issuing debt in international bond markets. As noted earlier, the Victorian distributors have said that the AER should have regard to the cost of debt issued in more liquid international markets as it would provide “*a reasonable indication of the yields that would be expected to prevail in Australian domestic markets*”. The AER may argue that it can not have regard to such information, as 6.5.2 (e) requires a focus on bonds issued in Australia. We accept that this may pose a problem. But we agree with the distributors’ advisors that evaluating the DRP after it has been swapped back into Australia dollars will ameliorate this. Furthermore there seems little doubt that internationally issued distributor debt is likely to provide a far more accurate estimate of the actual cost of debt for Victorian distributors – after all this is the market in which they raise non-bank capital. In this sense the AER will fulfil the requirements of 6.5.4 and the NEO more comprehensively than it currently does with its reliance on its Australian BBB+ benchmark.
- On the third, analysing Australian issued bonds that are not necessarily exchange traded is consistent with 6.5.2 (e). The AER should examine the term sheets of recently issued bonds to establish their yields and should use this information in its assessment of the DRP. If these bonds have traded, the AER should seek information on fair values, to establish estimates of yields to redemption.

Finally, the AER could also take account of the recent bond issue by APT in Australia. As noted earlier, the Joint Industry Association (JIA) recommended using just one bond (Tabcorp) rather than a flawed benchmark based on the cost of debt for companies that bear no relation to regulated network service providers. We agree that it would be more appropriate to use a single company, rather than a flawed benchmark. However, we would suggest – and the JIA would surely agree – that the cost of debt to APT would be a far better reference (than Tabcorp) of the cost of debt to monopoly network service providers in Victoria.

## 8.1 Conclusions

If the AER has regard to the factors that we suggest it should have regard to, this is likely to result in a DRP of no more than 120 bps, and quite possibly less. Setting the DRP at 120 basis points will reduce Victorian electricity distribution prices by around 7.1% and revenues by \$564m, from the amounts in the AER's draft decision.

### Summary

Our suggestion that the AER should have regard to other assessments of the DRP is surely uncontroversial. Ofgem, the ESC, ESCOSA, IPART and the QCA all had regard to a range of factors in deciding the appropriate DRP. None of these regulators relied on a mechanistic assessment of bond margins in a single, illiquid market. We appreciate that none of these regulators have had their discretion constrained by a deeply flawed Rule, as is the situation that the AER has to deal with. But, considering that the AER has been unable to achieve a literal implementation of the Rule anyway, the right course of action is for the AER to examine a wider range of evidence of the margins that distributors are actually paying in the markets in which they actually raise capital. Through this the AER will determine a DRP that reflects accepted good regulatory practice and is consistent with the National Electricity Objective.