Response to the distributors' "Submission in response to the Mountain Report on DRP"

Bruce Mountain
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Table of Contents

1 Introduction

This document is my rebuttal to a submission to the AER prepared jointly by the Victorian Electricity Distribution Businesses (these include Jemena, Citipower, Powercor, SP Ausnet and United Energy). The submission by these distributors was written in response to a report that I wrote for the Energy Users Association of Australia (EUAA), which was included as an attachment in a submission to the Australian Energy Regulator from the EUAA.

The submission by these distributors is that my report to the EUAA is based on flawed analysis, that my suggestions on the calculation of the DRP make unjustifiable departures from the National Electricity Rules and the AER's Statement of Regulatory Intent, and that my estimation of historic debt risk premia is inconsistent with regulatory intent.

I have broken down the distributors' critique into eight specific allegations, some of which have sub-points. I reject all but one of the distributors allegations and set out my reasoning for this in this submission.

It is my opinion that the distributors, and their advisors Jeff Belchin and Matthew Santoro of PricewaterhouseCoopers have wrongly impugned me. The distributors and their advisors have assiduously avoided discussion of the substantive issues, and have instead sought to influence the AER by attacking me and attempting to discredit my analysis. It is an indictment on them that they should participate in an important regulatory debate in this way.

My submission systematically states and then responds to the allegations that the distributors have made, in the order in which they are presented in the distributors' report.

2 Allegation 1: I am not a credible expert

The distributors have questioned my credentials. They claim (on page 1) that "*it is not clear that Mr Mountain is an expert in relation to the matters upon which he is expressing an opinion*". In footnote four this is described further by noting that as an engineer I have expertise in benchmarking operating and capital expenditure, but that "*it is not clear whether he has expertise in relation to the matters, of a financial and legal interpretation nature (sic)*" .

2.1 My response

The distributors seem to be using the phrase "it is not clear that Mr Mountain is an expert …" euphemistically. It seems that what they really mean to say is that "it is quite clear that Mr Mountain is not an expert … " To the extent to which the distributors needed greater clarity before making such pejorative euphemisms, they might have made the effort first to ask me for my credentials, which they did not.

I claim to be an expert in the economic regulation of electricity network monopolies, and consider that I am quite capable of setting out a reasoned analysis on the debt risk premium.

I have developed a career in the field of economic regulation from the time of my undergraduate studies, which I completed in 1990. I started my career in the Transmission Economics division of Eskom in South Africa. During my early career I was seconded to the Economics and Strategy division of Electricite de France in Paris to study economic regulatory arrangements in Europe. This involved study in France and subsequent interaction with economic regulators in Norway and Holland.

After returning to South Africa, in 1995 I was appointed to establish the economic regulatory division of the National Electricity Regulator (on unsolicited personal invitation of the inaugural Chairman).

In 1996 I was retained to advise the British Director General of Electricity Supply on aspects of the economic regulation of the National Grid Company (on unsolicited personal invitation of the Director General of Electricity Supply).

From 1997 to 2000 I was an Associate, Senior Consultant and then Principal Consultant in the Strategy, Policy and Economics division of PricewaterhouseCoopers in London. In this period I provided extensive regulatory advice to major electricity businesses in Great Britain including Scottish Power and the National Grid Company. In addition, during this period I completed numerous regulatory assignments in Hong Kong, Canada, Colombia, Venezuela, Turkey and South Africa for the World Bank, national and state governments and electricity companies.

I established a practice as an independent consultant in 2001 and since 2002 I have been resident in Australia. Since that time I have consulted extensively to the Australian Competition and Consumer Commission (from 2002 to 2006) on the economic

regulation of transmission network service providers. Since 2007 I have undertaken numerous assignments for the Energy Users Association of Australia.

My expertise in economic regulation and energy economics is well recognised by my consultancy peers. I have been retained by other prestigious consultancies including Access Economics and L.E.K Management Consultants in Australia, and Indepen in London to provide specialist advice.

In addition to my consultancy career I have undertaken unremunerated research in the field of energy economics and the economic regulation of network monopolies. These researches have been published in peer-reviewed journals including the Southern African Journal of Energy, the Electricity Journal (an American publication) and Energy Policy (a British publication). Most recently my research has been published in the Energy Policy (in collaboration with the highly respected economist Professor Stephen Littlechild). It bears particular note that the distributors have quoted extensively from this research in their other recent submissions to the Australian Energy Regulator.

I am a respected commentator on energy economics issues and frequently participate in televised and broadcast discussions and my work and views have been reported on in the press (including in The Financial Times, The Times, The Sunday Times, The Australian Financial Review, The Age and Business Spectator).

I am professionally qualified as an electrical engineer (I have a Bachelor and Masters degrees in this from the University of Town) and am also qualified as an accountant in England (I was admitted as an Associate Member of the Chartered Institute of Management Accountants in 1996).

3 Allegation 2: The Mountain Report departs from the NER

The distributors argue that my suggestion that the AER should take into account wider evidence of debt margins in the capital markets that the distributors actually participated in, is inconsistent with the requirements of the NER. Therefore, they conclude that the AER should not adopt my suggestions when making its final determinations.

3.1 My response

It is impossible for the AER to implement its specific requirements in the determination of the DRP because there is no benchmark corporate bond for BBB+ bonds with a ten year maturity. The distributors themselves have noted that and have themselves proposed an alternative approach to the specific requirement in the Rules[1].

Perhaps the distributors chose to selectively ignore that they had themselves proposed alternative approaches to the calculation of the DRP. The AER and other interested parties should disregard such inconsistent argument.

More broadly, the distributors have chosen to ignore the relevant problem which is that it is impossible for the AER to implement its precise obligation in setting the DRP as specified in Clause 6.5.2(e) because the data needed to do this does not exist.

What the AER should do about this? Clause 6.5.4 (e) (2) of the NER provides over-arching guidance on the determination of the cost of debt. This clause requires that the return on debt should reflect "*the current cost of borrowings for comparable debt*". My paper simply provided evidence of the actual cost of debt and broad suggestions on how the AER might usefully take account of this information. This is not, in any sense, a "departure" from the NER.

Finally, as I noted in my report, even 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[2].

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[1] See for example 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.*

2. Australian Energy Regulator, June 2010. *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, page 508.

4 Allegation 3. The Mountain Report does not explain how his approach promotes the National Electricity Objective

The distributors say that there is no inconsistency between the requirements in the Rules in setting the debt risk premium, and the requirements of the National Electricity Objective. Accordingly they suggest that there is no case to be made for an alternative approach to the Rules

4.1 My response

To support their statement that there is no inconsistency between the NEO and the Rules, the distributors point to a general statement in the AER's Statement of Regulatory Intent of May 2009 which says that the AER considers that there are not any requirements in the NEO and the Rules that cannot be reconciled.

At face value this statement would seem to support the distributors' contention that there is no inconsistency. But there is compelling evidence that this is not so. In particular:

- The Statement of Regulatory Intent is completely silent on how the Debt Risk Premium is to be established. It provided no argument or guidelines on how it is to be set – as such it did not even consider whether there might be any inconsistency here;
- The AER has pointed out several times that it is not possible to implement its requirements under the Rules[3];
- The distributors themselves have pointed to the fact that Rules are impossible to implement[4].

The distributors' allegation that there is no inconsistency is trite and obviously wrong.

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[3] See for example Australian Energy Regulator, June 2010, *Victorian electricity distribution network service providers: Draft Decision distribution determination 2011-2015*, page 515. Also, see the AER's recent consultation paper "*AER draft approach for measuring the debt risk premium for the Victorian Electricity Distribution Determinations. 27 September 2010"*, that attempts to deal with the impossible situation of not being able to implement its obligations in the Rules.

[4] 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.*

5 Allegation 4: Departure from the Statement of Regulatory Intent

The distributors argue that I have not provided justification for the AER to depart from the approach to the DRP set out in the SORI. They claim that I "*relied solely*" on a sample of bonds by Victorian distributors which have neither the credit rating nor the maturity set out in the SORI (i.e. 10 years and BBB+).

5.1 My response:

The distributors seem be intentionally obfuscating in order to avoid addressing the substantive issue: the AER is unable to implement its requirement under the Rules since a benchmark for 10 year BBB+ bonds does not exist. It is impossible to implement the Rules in this area. What should be done about this, is the issue that should be focused on. Rejecting evidence of the cost of debt because this evidence fails to meet a requirement that is impossible to meet is, of course, nonsense.

In addition, the distributors claim that I have "*relied solely*" on my sample of bonds to estimate the DRP. This is also wrong. My paper draws the AER's attention to numerous data including the market for bank debt in Australia (i.e. loans negotiated with banks), the outcome of international bonds issued by Australian network service providers, swapped back into Australian dollars (as they typically are); and analysis of the term sheets of recently issued Australian bonds whether they be exchanged-traded or traded through brokers or other intermediaries.

Contrary to the distributors' allegation, I have not relied "*solely on this sample of bonds to estimate the DRP*". That the distributors would attempt to misconstrue my work in this way suggests that they may be intentionally seeking to mislead the AER and other stakeholders.

6 Allegation 5: Observed and actual costs of debt

I have read this section of the distributors' submission several times, but am unable to understand what their claim is. They appear to be suggesting that an observed cost of debt need not be one that is actually observed, but could be one that is derived (in their words – "via a process of analysis and estimation"). They seem to claim that I have been confused in not understanding that the word "observed" might encompass some analysis and estimation and hence that I have incorrectly placed greater weight on the historic values of the actual cost of debt, rather than what they call a "benchmark cost of debt".

6.1 My response

If I understand the distributors claim correctly, they seem to be indulging in linguistic contortions (what the word "observed" means) to try to defend not placing any weight on information of the actual cost of debt. This seems quite silly.

It is quite reasonable to suggest that observation might include some analysis and estimation. There is surely no problem with this. But this is not the issue. The issue again, at the expense of repetition, is that a 10 year BBB+ bond benchmark does not exist. It has to be contrived from other bonds with different (much shorter) durations, bonds of companies whose business has nothing to do with the provision of regulated network services, and credit ratings some way from BBB+. To claim that contriving a benchmark from such different data is to "observe" a 10 year BBB+ benchmark, and that historic information of the actual bonds raised by regulated distributors has no value, is clearly unsustainable.

7 Allegation 6: Swap rates and the cost of debt to DNSPs

The distributors are making three allegations here.

1. The first is that I was wrong to estimate a debt risk premium assuming that distributors remain exposed to the 90 day bank bill swap rate.
2. The second is that the way that I have used the term "debt risk premium" is inconsistent with its "common and accepted usage". The allegation is that this leads to "misleading information" about the debt risk premium that is required under the Rules and the AER's Statement of Regulatory Intent.
3. The third is that I have failed to account for credit margins on swap contracts (which the distributors suggest is worth 5 to 15 points).

7.1 My response:

The first two points are substantive and the third less so. I will deal with each in turn.

Point 1.

On the first point, as I recognised in my paper on page 7 (and as the distributors themselves noted), distributors often fix the rates of interest on their bonds, by swapping their exposure to short term rates for longer term fixed rates. Does this mean that we should ignore an estimate of the DRP assuming that such short term rate exposure is not swapped? The distributors suggest we should, I suggest we should not.

The decision to effectively fix rates is a significant financial decision. By fixing the rate, distributors reduce their exposure to uncertain fluctuations in interest rates. They may profit from this (if the rate they fix at turns out to be lower than the rate they would receive if they remain exposed to the short term rate). Equally they may be worse off (if the long term rate is higher than the short term rates over the life of the loan).

Generally, distributors should expect to pay higher effective rates if they fix their rates, because absorbing the risk of fluctuating rates has a cost. Even though the effective fixed rate may be higher, this may still be an economically sensible decision (one that is in users' interests) if the cost of paying someone else to bear this risk, is less than the cost to the distributor of bearing the risk.

The question for regulators in this is whether users should appropriately bear all or some of the risk of short term interest rate exposure or whether it would be better that they pay someone else to insulate the distributors (and ultimately themselves) from this risk?

This question is akin to the question on the appropriate allowance that might be made for insurance of a variety of business risks: should users be required to pay for large insurance premiums so that the business is well insulated against a full variety of risks,

or would it be better for businesses to absorb some of these risks and pay lower insurance premiums.

This seems to me to be a perfectly valid question that the regulator, users and the distributors should ask. I have never suggested that the DRP should be based only a calculation assuming only short term interest rate exposure, neither have I even suggested that this is the best or preferable approach. Nevertheless the information bears examination and hence I completely reject the distributors' allegation that it is wrong to calculate a DRP estimate assuming floating rate debt.

Point 2.

This is a particularly important point and the argument merits close attention. On the basis of advice from Jeff Belchin and Matthew Santoro, Executive Directors at PricewaterhouseCoopers in Melbourne, the distributors assert that I have used the term debt risk premium in a way that leads to flawed conclusions because the definition of the debt risk premium that I have used is inconsistent with its "common and accepted usage". I think this is wrong and the rest of this subsection explains why.

It is important to be clear on the difference in the calculation undertaken by Belchin and Santo, and the calculation I have presented. Both my and their calculation start in the same way by calculating an effective annual nominal interest rate for each of the bonds itemized in my original Table 1. The outcome of their and my calculation to this point is very similar: my estimate of the average effective annual interest rate for all the bonds is 7.02% while theirs is 6.97%.

Belchin and Santoro then calculate the debt risk premium as the difference between the effective annual interest rate and the government bond rates that they have used. The government bond rates that they have used correspond (they say) as closely as possible to the term of the respective bonds. Belchin and Santoro claim that the debt risk premium defined in this way is consistent with its "common and accepted usage".

My approach on the other hand has been to use the AER's calculation of the risk free rate in its Draft Decision in order to estimate the DRP.

The average government bond rate in the Belchin and Santoro analysis is 3.99%, while the bond rate in the AER's draft decision (which I have used) is 5.65%. Since the government bond rate that Belchin and Santoro have used is much smaller than the bond rate that I have used, the DRP based on their approach is commensurately larger than the DRP in my calculation.

So, the relevant question is what government bond rate should be used when interpreting the historic information on bond margins. Belchin and Santoro say that government bond rates corresponding to the term of the bonds should be used because this is the "common and accepted" usage.

But what does "common and accepted" usage mean – to whom is Belchin and Santoro's approach common and accepted, and mine not?

Perhaps Belchin and Santoro would suggest that it is common and accepted amongst the community of financial analysts? But, there is reason to be doubtful of this. When the Royal Bank of Scotland published its research note on bond issues (which provides

the base data for this whole analysis), they defined the margin as a premium on the 90 day bank bill swap rate. In fact, the only bond issue by a network utility that I am aware of where the margin has been stated as a premium on government bonds of duration that matches the term of the bond, is APT's recent 10 year BBB bond issue.

The next (and more relevant) question is whether defining the DRP as Belchin and Santoro have is "common and accepted" in the regulatory economics debate. Here the answer is clearly not. The National Electricity Rules defines the DRP as "*the margin between the annualized nominal risk free rate and the observed annualized Australian benchmark corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk free rate …*" Since the risk free rate is based on ten year government bonds, so the Rules are quite clear that the DRP must be established based on these ten year bonds, not the shorter two, three and five year government bonds that Belchin and Santoro have used.

The ten year bond that I have used is the one that the AER has used in its draft decision – which is the average rate on 10 year Commonwealth Government Securities in the 15 business days from 19 March 2010.

Belchin and Santoro must surely resile from their "common and accepted" definition of the DRP, since it is quite obviously inconsistent with the Rules. In its place they might then wish to argue that the government bond that should be used to calculate the DRP should be the 10 year government bond at the time that the bonds were issued. Indeed their clients, the distributors, have proposed exactly this (see Figure 1 on page 11 of their submission). But there is strong argument against this too. Specifically, in the appeal to the Australian Competition Tribunal by Energy Australia against the AER's choice of the risk free rate, the ACT[5] rejected the use of the 10 year risk free rates that would have prevailed at the times that the bonds (listed in Table 1 of my report), were issued. The ACT made this decision, because it concluded that the risk free rates at this time were unrealistically low:

"*The Tribunal considers that an averaging period during which interest rates were at historically low levels is unlikely to produce a rate of return appropriate for the regulatory period. While the economic outlook is still uncertain, and it is not impossible that rates during the regulatory period could be at levels somewhere near those prevailing in February/March 2009, the Tribunal considers that to be an unwise assumption. Even if economic conditions were to deteriorate again, there would be no basis at this stage for assuming that historically low interest rates will be representative of each of the five years commencing on 1 July 2009.*"

The outcome of the Tribunal's decision in this appeal was a risk free rate of 5.82%, compared to the rate of 4.29% that the AER had decided in its Final Decision.

The rate that I used in my calculation of the implied DRP relevant to the historic bond issues, was 5.65%. (i.e. the rate used in the AER's Draft Decision). This rate is consistent with the long term average risk free rate, and lower (i.e. implying a higher DRP) than the 5.82% that the Tribunal decided in the appeal by Energy Australia and others, that it upheld.

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[5] Australian Competition Tribunal, 12 November 2009. Application by Energy Australia and others [2009] ACompT 8.

By contrast, the average rate that Belchin and Santoro used for calculation of the DRP is 3.99% - even lower than the 4.29% that the AER used its Final Decision for the New South Wales distributors, and which was subsequently rejected by the ACT as being unrealistically low.

In summary, the choice of the risk free rate that Belchin and Santoro have proposed, is wrong in every sense:

- It is not the "common and accepted" definition of the term as they have asserted it is;
- It is quite obviously contrary to the specific requirement for the definition of the DRP as set out in Clause 6.5.2 (e) of the NER;
- It results in a risk free rate that is even lower than the level that the Australian Competition Tribunal clearly rejected in the appeal by Energy Australia and others.

Accordingly I reject Belchin and Santoro's conclusion that the analysis of observed yields on the sample of bonds averages 298 basis points. To the contrary they have provided no good reason to suggest that my conclusion of the average of 137 basis points is materially wrong.

Point 3.

Belchin and Santoro assert that the debt risk premium that I suggested is understated because it fails to account for credit margins on swap contracts – which they suggest adds 5-15 basis points – and that I have failed to account for further fees for very large swap transactions.

I reject this for two reasons:

- As discussed earlier, I don't agree that it should be accepted as a fait accompli that the appropriate cost of corporate debt should assume that there is no floating rate exposure. The appropriate assumption on floating versus fixed exposure and the amount of the "insurance" cost to be borne by users is a matter for debate. Accordingly an automatic assumption that the DRP should be raised by 5 to 15 points is not appropriate.

- Secondly, even if it is decided to make some allowance for credit margins on swap contracts it is reasonable to expect that these costs will already have been compensated in the allowance that the AER makes for debt raising costs.

8 Allegation 7: Averaging period

The distributors have claimed that the DRP that I have calculated is wrong since it uses the cost of debt for bonds that were issued outside of the averaging period for the distributors. They assert that the NER and SORI require that the DRP is calculated over an agreed averaging period that is as close as practically possible to the start of the regulatory control period. They therefore conclude that my approach fails to satisfy the NER and SORI.

8.1 My response

The distributors are not correct in their assertion that the DRP should be established as close as possible to the start of the regulatory control period. There is no such requirement in the Rules – which is completely silent on what averaging period should be used.

The distributors are also not correct in their assertion that the SORI requires that the DRP is set as close as practically possible to the start of the regulatory control period. To support their assertion, the distributors have pointed to pages 170 and 171 of the SORI. These pages describe the AER's intention in relation to the averaging period for the risk free rate, and are completely silent on the averaging period for the calculation of the DRP.

Furthermore, as the distributors ought to be well aware, the choice of the averaging period was the subject of a very significant appeal by Energy Australia (and others) described in my response to Allegation 6. The ACT decided in this appeal that there is no good reason for the averaging period for the risk free rate (or the DRP) to be established as close to possible to the start of the regulatory control period.

9 Allegation 8. Yield estimates

The distributors claim that I was wrong to say that the risk free rate in the Victorian draft decision is lower than the risk free rate that pertained during the period of the bonds that I used to estimate debt risk premia. To support their statement, the distributors state that the AER decided a risk free rate of 4.29% in its final decision for the New South Wales distributors in March 2009, and that this is 135 basis points below the rate determined in the draft decision for Victoria.

9.1 My response

As the distributors should well know, Energy Australia and others successfully appealed the AER's Final Decision to the Australian Competition Tribunal. As I noted earlier, the risk free rate arising from the Tribunal's decision is 5.82% which is indeed more than the 5.65% in the AER's Draft Decision for the Victorian distributors.

10 Allegation 9. DRP for the APT pipelines bond

The distributors, on the advice of Belchin and Santoro, claim that there is a material error in my calculation of the DRP for the APT Pipelines bond.

10.1 My response

I agree that there is a material error in my calculation of the DRP for the APT Pipelines bond. I had misread the APT press release announcing this bond, which stated the debt premium of its bond on top of the 10 year swap rate. I had mistakenly understood that it had referred to the premium on the 90 day bank bill swap rate. When I correct for this mistake, and assuming a risk free rate as specified in the AER's draft decision, the correct DRP for this BBB bond should be 241 basis points.

Belchin and Santoro have calculated the DRP for this bond to be 304 basis points. I do not agree with their calculation. On the basis of the reasoning set out in my response to Allegation 6, they have selected the wrong risk free rate (5.17%) and should instead have used the risk free rate in the AER's decision.