Report prepared for the

Australian Energy Regulator

A Note on the Completion Method

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1. INTRODUCTION

Pursuant to the National Electricity Rules, the Australian Energy Regulator (AER) is currently in the process of making distribution determinations for the Queensland and South Australian electricity distribution network service providers (DNSPs) for 2010 – 2015.

In the original regulatory proposal submitted in July 2009, the South Australian DNSP – ESTA Utilities – sought an allowance for the cost of the "Completion Method", which involves accessing debt funding in advance of the time it is required. In its draft determination, the AER did not approve this allowance.[1]

This report deals with the costs of the Completion Method.

The revised regulatory proposal submitted by ETSA Utilities in January 2010 did not present any new arguments on the costs of the Completion Method but rather stated that ETSA Utilities had engaged a consultant, PricewaterhouseCoopers (PwC), to provide advice on the issue. A further submission on the costs of the Completion Method from ETSA Utilities[2], accompanied by a report from PwC[3] was subsequently received in February 2010.

1 Australian Energy Regulator (2009b p.238).
2 ETSA Utilities (2010a).
3 PricewaterhouseCoopers (2010).

The AER considers that there is a need to consider this issue further and in this regard has sought advice in evaluating the claims by ETSA Utilities for debt raising costs associated with the completion method (having regard to the regulatory framework described by the National Electricity Law (NEL) and National Electricity Rules (NER)), and in particular, on the following matters:

- Does the approach taken by PwC produce an accurate and reasonable estimate of the benchmark debt raising costs associated with the completion method, the commitment method and the underwriting method?

- Noting the statement by Standard and Poor's on the determinants of a rating action, is it prudent for a distribution network service provider to refinance its debt in accordance with the completion method?

- Should benchmark debt raising costs associated with the completion method be included as part of an operating expenditure allowance?

- Would the costs associated with the completion method be covered by the existing AER approach to (direct and indirect) debt raising costs?

- If the costs are appropriate for inclusion as part of an operating expenditure allowance, and if the approach taken by PwC does not produce an accurate and reasonable estimate of these costs, what is a reasonable estimate of the benchmark costs associated with the completion method?

A copy of my resume is attached at the end of this report.

2. THE COMPLETION METHOD

The Key Issue

ETSA Utilities seeks compensation for costs associated with the "Completion Method" which is one of three alternative approaches to refinancing debt – the other two being the Commitment Approach and the Underwriting Approach.[4] In essence, the Completion Method involves the early refinancing of debt with new debt which is raised about three months prior to the time that it is actually needed. The common objective of all three approaches is to reduce refinancing risk.[5] The costs associated with the Completion Method have been described by the AER as follows:

> *"The completion method refers to debt refinancing that occurs earlier than when the funds are actually required by the DNSP. During the overlapping period (in this case, approximately three months) between the early commencement of the new loan and the scheduled repayment of the old loan, the business has effectively doubled its debt load. The business' interest costs are not doubled, since it can defray some of the cost of the loan by reinvesting the funds. However, given the limited opportunities for reinvestment, there is an increase in costs to the business."*[6]

The key issue for consideration is whether the cost of the Completion Method is an appropriate cost for the purposes of compensation, and if so, the means by which this compensation should proceed.

It is noted that the three approaches to reducing refinancing risk were identified by Standard and Poor's in one of its April 2008 publications, in which it states:

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[4] In the "Commitment Approach", the firm obtains an advance, binding commitment from its lenders that they will provide the funds at the appointed time, such as the time that the debt matures. In the "Underwriting Approach", the firm obtains a binding, advance commitment from a particular party that it will underwrite the issue and take up any shortfall in the event that there are insufficient subscribers for a particular debt placement.

[5] As ETSA Utilities (2009) neatly summarise: *"Refinancing risk is the risk that replacement finance will not be available when debts fall due for repayment, thus leading to default."* (p.2)

[6] Australian Energy Regulator (2009c p.575).

"For the Australian investment-grade corporates, we expect to see a measured and logical approach to meet upcoming debt maturities ... To avoid negative rating consequences, the ideal progression would be:

- *12-to-18 months ahead of maturity, the company would have a detailed and credible refinancing plan (including a contingency plan);*
- *No less than six months ahead of the maturity, the company would have documentation substantially in place for the replacement debt issue/s; and*
- *No less than three months ahead of maturity, the refinancing would be essentially completed, committed, or underwritten."*[7]

2.1 The Current Position of the AER

The current position of the AER is to deny the original claim for the costs of the Completion Method for the following reasons:

- the costs of the Completion Method do not represent efficient costs incurred by a benchmark network service provider.

- (at the time of the original regulatory proposal) it did not appear that ETSA Utilities had "closely investigated" the two alternative approaches – the Commitment Approach and the Underwriting Approach.

- although Standard and Poor's indicated that a firm without an implemented refinancing plan (three months ahead of the maturity date) may be evaluated, this did not mean that there would be an automatic downgrade of the firm's credit rating.

[7] Standard and Poor's (2008 p.7).

2.2 The Current Position of ETSA Utilities

In response to the draft determination, and based on the supporting report from PwC, ETSA Utilities still maintains that an allowance for the costs of the Completion Method is appropriate on the following grounds:

- it is "common practice" for firms to use the Completion Method to refinance debt at least three months prior to the maturity date.

- according to PwC, the cash costs associated with the Completion Method represent the lowest cost of the three alternative approaches for securing suitable arrangements for refinancing debt three months from the maturity date.

- whilst it is acknowledged that Standard and Poor's may not automatically downgrade firms that do not have an implemented refinancing plan, it is nonetheless considered prudent for a benchmark DNSP to do so.

2.3 Discussion

Conceptual Issues

At the conceptual level, it is my view that there is merit in the claim by the ETSA Utilities for an allowance for the cost of the Completion Method for the following reasons:

- It has previously been accepted that (certain) costs of raising debt are legitimate costs for the purposes of compensation. For example, in the draft determination, the AER states:

  "Debt raising costs are costs which are incurred each time debt is raised or refinanced. These costs may include underwriting fees, legal fees, company credit rating fees and other transaction costs. The AER has previously accepted that debt

raising costs may be a legitimate expense for which a DNSP should be provided an allowance"[8] *[emphasis added here]*

- It is prudent for a DNSP to implement a refinancing plan in advance of when the debt falls due (in order to reduce refinancing risk). As ETSA Utilities states:

  "at issue is whether it is prudent and proper for a benchmark firm to refinance consistent with the manner in which ETSA Utilities proposes to refinance its maturing debt as discussed in the Original Proposal. The refinancing of debt at least 3 months prior to the maturity date of that debt ensures both that the business does not default on the principal repayment of a debt issue, as well as removing the risk of any negative credit ratings action"[9]

  Both PwC and Standard and Poor's confirm the prudence of having an early refinancing plan. For example, Standard and Poor's state:

  "Liquidity and liability management have always been key components of our rating methodology and their importance within credit analysis have been borne out in the current credit market conditions. Prudent liquidity and liability management by corporates means having sufficient cash to cover near-term maturities or a refinancing plan that we view as having little execution risk,"[10]

  The key purpose of a refinancing plan is to reduce risk which in turn strengthens the financial position of a firm, relative to the position it would have if it otherwise did not have a refinancing plan. By definition, a refinancing plan is therefore prudent. Although, prudence is subjective in so far as what may be considered prudent by one firm may not be considered prudent by another, Standard and Poor's makes it clear that it is of the view that the Completion Method, the Commitment Approach and the Underwriting Approach are equally prudent ways to deal with refinancing risk. Further, the extent to which

8 Australian Energy Regulator (2009b p.235).
9 ETSA Utilities (2010a p.2).
10 Standard and Poor's (2008 p.6).

comparator firms (that inform the benchmark) adopt refinancing plans, strengthens the argument that the associated expenditure is indeed prudent.[11]

It is important to note that the most appropriate approach – Completion, Commitment, Underwriting or something else – for any given firm is ultimately a policy issue for the firm's board, subject to which particular option(s) is(are) available to that firm – but of course, compensation should only be based on what is considered to be the efficient costs incurred by a benchmark DNSP (rather than any particular DNSP under consideration). In this regard, it is noted that efficient is usually taken to mean least cost (and which relate to actions which maintain, but not improve, the benchmark credit rating).

- The Completion Method is one of a number of appropriate ways by which a firm can implement a refinancing plan and reduce refinancing risk. As PwC state:

  "it is common practice for commercial business to refinance debt according to the completion method at least three months prior to the relevant debt facility expiring." [12]

  PwC supports its position with details of five such refinancing transactions between February 2009 and September 2009.[13]

  In my view, it does not really matter which of the three methods specified by Standard and Poor's – the Completion Method, the Commitment Approach or the Underwriting Approach – is most commonly used. Rather, what is most important is that the Completion Method is recognised as being one of the appropriate approaches to reduce refinancing risk.

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[11] Whilst recent events in world credit markets have arguably drawn more attention to the issue of refinancing risk, in my view, the prudence of an appropriate refinancing plan was well accepted before then and will continue to remain thereafter.

[12] PricewaterhouseCoopers (2010 p.5).

[13] PricewaterhouseCoopers (2010 p.26).

Practical Issues

Notwithstanding the above view that in principle, the costs of the Completion Method represent an appropriate cost for compensation, there are three issues which require further consideration in determining the magnitude of any allowance (based on what is considered to be the efficient costs incurred by a benchmark DNSP):

- there may be a partial overlap in the claim for the costs of the Completion Method and the current allowance for debt raising costs.[14]

  In the draft determination, the AER has stated that an allowance of 9.1 basis points per annum (bppa) for debt raising costs is a reasonable benchmark for ETSA Utilities. However, Table 8.16 indicates that the bulk of this amount – 7.33 bppa – represents gross underwriting fees.[15] Since the Completion Method and Underwriting share a common purpose, then it is not clear why there should be allowance for both the costs of the Completion Method and gross underwriting fees. In fact, PwC examines the costs of the three alternative methods and concludes:

  "based on the assumptions set out in this report, the cash costs associated with the completion method represent the lowest cost of the three options for securing suitable arrangements for renewing debt three months out" [16]

  whilst ETSA Utilities states:

  "After a proper examination of the alternatives, the attached PwC report concludes that the cash costs associated with the completion method represent the lowest cost of the three options (completion, commitment, and underwriting) for securing suitable arrangements for renewing debt three months from maturity of that debt"[17]

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14 There is no suggestion here that ETSA Utilities is intentionally seeking to "double-dip" an allowance for the same cost.

15 Australian Energy Regulator (2009b p.238).

16 PricewaterhouseCoopers (2010 p.5).

17 ETSA Utilities (2010a p.2).

In this regard, the AER may wish to seek clarification from ETSA Utilities on the distinction between the two types of costs.

- in its original proposal, ETSA Utilities incorporated an allowance of 11.2 bppa which compares to the later advice from PwC which suggests a slightly higher amount:

  "It is also relevant to note that the PwC report finds that the efficient cash cost associated with the refinancing of $100 million of debt is approximately $1.3 million, which equates to 13 bppa, based on the completion method. This is higher than the 11.2bppa incorporated in ETSA Utilities' regulatory proposal, indicating that ETSA Utilities has taken a conservative approach to estimating the costs associated with the completion method."[18]

  Whilst the PwC approach to estimating the cash cost of the Completion Method (of about $1.3 million) is reasonable[19], PwC actually suggests the relevant amount is 20-24 bppa[20] – the difference appears to be due to PwC converting the upfront cash cost into an equivalent annual amount, after taking into time value of money effects. The key point here is that any allowance for the costs of the Completion Method should be estimated on a basis consistent with the current allowance for debt raising costs.

[18] ETSA Utilities (2010a p.2).

[19] The PwC approach to estimating the cash cost of the Commitment Approach is also considered reasonable.

[20] According to PwC (2010 p.5): "*the cash cost associated with the refinancing of debt based on $100 million, if it was* ***completed*** *no less than three months ahead of maturity, is estimated to be between $1.248 million and $1.498 million (equivalent to 20 bps pa and 24 bps pa)".*

- the AER may wish to seek clarification from ETSA Utilities/PwC on its approach to estimating the cash costs of the Underwriting Approach.

In particular, in the draft determination, the AER arrived at its (updated) estimate for underwriting costs of 7.33 bppa, after following the methodology contained in the 2004 study by ACG.[21] In comparison, PwC suggests the appropriate estimate is 16-4 bppa but it then adds a "credit margin premium" of 30-50 bppa leading to a total cost of 46-54 bppa for the Underwriting Approach.[22] PwC has assumed that the underwriting is secured three months ahead of time, thereby exposing the underwriters to a greater level of risk than would normally be the case – and in response the underwriters would seek to mitigate their risks through a combination of means, including:

- *Charging of upfront / underwriting fees to remunerate the bank for the risks*
- *Require the underwritten price (i.e. credit margin) to be at premium to where benchmark issuers / credits would normally be expected to price comparable bond transactions. The premium would be required to provide the bank comfort that it would be able to successfully sell all the bonds"*[23]

However, it appears that this credit margin premium may in effect represent underpricing of the new debt.[24] As discussed in an earlier report, assuming allowed revenues are determined using an appropriate estimate of the cost of debt then it is my view that, underpricing should not be allowed as a (direct) cost of raising debt capital (otherwise double counting would result).[25] In this case, the relevant PwC estimate for compensation purposes would then appear to be the upfront underwriting fee of 16-4 bppa.

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21 Allen Consulting Group (2004).

22 PricewaterhouseCoopers (2010 p.21).

23 PricewaterhouseCoopers (2010 p.19).

24 A similar issue appears to apply to a "market flex" provision which allows the underwriter to increase the credit margin on the bond if insufficient bids are received by investors – see PricewaterhouseCoopers (2010 p.19).

25 Handley (2009 p.14-17).

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Australian Energy Regulator 2009a, Draft Decision – Queensland Draft Distribution Determination 2010-11 to 2014-15, 25 November.

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Standard & Poor's, 2008, Refinancing and Liquidity Risks Remain, But Australia's Rated Corporates Are Set To Clear The Debt Logjam, Ratings Direct, 22 April.

Curriculum Vitae

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March 2010

QUALIFICATIONS

BCom, BMath *Newcastle*, MCom (Hons) *Melbourne*, PhD *Melbourne*

EMPLOYMENT HISTORY

Period	***Organisation***	***Position***
Jul 1993 to date	University of Melbourne Melbourne	Associate Professor of Finance (since July 2005)
Sep 2009 to Jan 2010	Stern School of Business New York University New York	Visiting Associate Professor of Finance (Fall Semester 2009)
May 2008 to Sep 2008	Stern School of Business New York University New York	Visiting Associate Professor of Finance (Summer Semester 2008)
Aug 1988 to Jul 1993	SBC Australia *(Now UBS)* Sydney and Melbourne	Corporate Finance Executive
Nov 1985 to Aug 1988	Coopers & Lybrand *(Now Pricewaterhousecoopers)* Newcastle	Audit Senior

RESEARCH

Research Focus: Corporate finance, derivative security pricing, corporate finance applications of derivative security pricing

Scholarly Publications (since 2000)

- Handley, J.C., 2008. "Dividend Policy: Reconciling DD with MM". Journal of Financial Economics, 87, 528-531.

- Handley, J.C. and K. Maheswaran, 2008. "A Measure of the Efficacy of the Australian Imputation Tax System". Economic Record, 84, 82-94.

- Handley, J.C. and K. Maheswaran, 2008. "Re-examination of the Historical Equity Risk Premium in Australia". Accounting and Finance, 48, 73-97.

- Handley, J.C., 2005. "On the Upper Bound of a Call Option". Review of Derivatives Research, 8, 85-95.

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Case Studies

- Tufano, P. and J.C. Handley, 1999. "General Property Trust". Harvard Business School case study 299-098, HBS Publishing.

Work in Progress

- Brown, C.A., J.C. Handley and K. Palmer. "A Closer Look at Barrier Exchange Options".

- Brown, C.A., J.C. Handley and K. Palmer. "Partial Differential Equations for Asian Option Prices".

- Handley, J.C. and C. Sobfeldt-Hansen. "Floating Priced Convertibles – A Direct Test of the Faulty Contract Design and the Last Resort Financing Hypotheses"

- Brown, C.A., J.C. Handley and A. Lamba. "Share Buybacks and Information Asymmetry – Winners and Losers"

- Handley, J.C. and M. Pinnuck. "Testing for Capital Structure Persistence Using a Flow Rather than a Stock Measure".

TEACHING

Teaching Focus: Financial Management, Corporate Finance, Derivatives, Investments

Awards

- 2008 Dean's Certificate for Excellence in Graduate Teaching.

- 2007 Dean's Certificate for Excellence in Undergraduate and Postgraduate Teaching.

- 2006 Dean's Certificate of Excellent Undergraduate and Postgraduate Teaching.
- 2005 Dean's Certificate of Excellent Undergraduate and Postgraduate Teaching.
- 2004 Dean's Certificate of Excellent Undergraduate Teaching for 2004.
- 2003 Dean's Individual Award for Excellence in Teaching in the Faculty of Economics and Commerce.[26]

  In the citation to the award, the Dean of the Faculty of Economics, Professor M.A. Abernethy wrote: *"The Award is based on your outstanding contribution to curriculum development in finance at both the undergraduate and postgraduate level and your excellent teaching evaluations over a lengthy period of time"*

ADMINISTRATION AND LEADERSHIP

- Deputy Head, Department of Finance, 2009—.
- Coordinator, PhD Program in Finance, 2009.
- Academic Director, Master of Applied Finance Program, 2006—2008.
- Coordinator, Honours Program in Finance, 2001—2003.
- Chair, 2003 Review Committee of the Honours Program in Finance at the University of Melbourne
- Chair, 2002 Review Committee of the Undergraduate Program in Finance at the University of Melbourne

KNOWLEDGE TRANSFER AND CONTRIBUTION TO THE PROFESSION

I have provided expert advice on various financial matters to the Australian Accounting Standards Board, Australian Competition and Consumer Commission, Australian Energy Regulator, KPMG Corporate Finance and the New Zealand Commerce Commission, including the following recent engagements:

- 2010, Consultant to the Australian Energy Regulator on matters dealing with the AER Electricity Distribution Determinations for Queensland and South Australia for 2010-2015, Victoria for 2011-2015 and Gas Distribution Decisions for New South Wales and the Australian Capital territory for 2010-2015, March–.
- 2009, Consultant to the Australian Energy Regulator on matters dealing with the AER Electricity Distribution Determinations for Queensland and South Australia for 2010-2015, October.

[26] This is awarded for the best performance in the entire Faculty of Economics and Commerce which covers four departments: Department of Accounting and Business Information Systems, Department of Economics, Department of Finance, Department of Management.

- 2009, Consultant to the Australian Energy Regulator on matters dealing with The AER Review of Proposed Debt and Equity Raising Costs and the Weighted Average Cost of Capital for the 2009–14 Regulatory Control Period, April.

- 2009, Consultant to the Australian Energy Regulator on matters dealing with The AER Review of the Weighted Average Cost of Capital for Electricity Distribution and Transmission, March/April.

- 2009, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the years ending 30 June 2005 and 2006, June.

- 2008, Consultant to the Australian Energy Regulator on matters dealing with The AER Review of the Weighted Average Cost of Capital for Electricity Distribution and Transmission, November.

- 2008, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the years ending 30 June 2004 and 2005, April.

- 2008, Presentation to the ACCC / AER on the Weighted Average Cost of Capital of Regulated Firms, February.

- 2007, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the year ending 30 June 2004, March.

- 2006, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the year ending 30 June 2004, May.

- 2005, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the year ending 30 June 2003, February.

- 2003, Consultant to the New Zealand Commerce Commission on matters dealing with the Telecommunications Service Obligations (TSO) Determination for the period ending 30 June 2002, June.

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