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# **ETSA Utilities Revised Regulatory Proposal 2010–2015**

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## **Weighted average cost of capital**

# 13

## WEIGHTED AVERAGE COST OF CAPITAL

In this chapter of the Revised Proposal, ETSA Utilities presents its response to the AER's Draft Determination on the weighted average cost of capital (WACC).

In response to the Draft Determination, and without necessarily agreeing with the basis for the AER's Draft Determination in respect of these parameters, ETSA Utilities has revised its Original Proposal to:

- adopt a value for the market risk premium parameter of 6.5%; and
- measure the debt risk premium by reference to the CBASpectrum service.

For the reasons set out in this chapter, ETSA Utilities does not accept the AER's Draft Determination with respect to the use of an imputation credit factor of 0.65 and maintains that an imputation credit factor of 0.5 is consistent with the requirements of the Rules.

## 13.1

### MARKET RISK PREMIUM

#### 13.1.1

##### Rule Requirements

Rule 6.5.2(b) requires that the rate of return for a DNSP is calculated in accordance with the Capital Asset Pricing Model (CAPM). The market risk premium (MRP) is an input to the CAPM and is the expected return above the risk free rate that investors would require to invest in a well diversified portfolio of securities. The MRP represents the level of non-diversifiable risk across all available investments.

The Statement of Regulatory Intent (SORI) adopted a MRP of 6.5 percent.

#### 13.1.2

##### ETSA Utilities' Original Proposal

ETSA Utilities proposed a value of 8 percent for the MRP. At the time of lodging its Original Proposal ETSA Utilities considered this figure an appropriate reflection of the pricing of risk with regard to prevailing market conditions.

#### 13.1.3

##### The AER's Draft Determination and Response

The AER adopted the SORI MRP figure of 6.5 percent. The AER stated that at the time of the Draft Determination there was not persuasive evidence to depart from the SORI value.<sup>397</sup>

ETSA Utilities adopts in this Revised Proposal, the SORI determined value for MRP of 6.5 percent, but does not necessarily agree or accept the underlying economic analysis in the Draft Determination on this subject. ETSA Utilities maintains that at the time of lodging its Original Proposal there was significant risk in financial markets that meant investors required a much higher medium term MRP than the SORI value.

#### 13.1.4

##### Revised Proposal

##### Revised Proposal

ETSA Utilities adopts the SORI determined value for MRP of 6.5 percent, consistent with the AER's Draft Determination.

## 13.2

### THE VALUE OF IMPUTATION TAX CREDITS

#### 13.2.1

##### Rule Requirements

The Rules at clause 6.5.3 require the AER to make an allowance for the estimated cost of corporate tax. Rule 6.5.3 requires the application of the formula:

$$ETC_t = (ETI_t \times r_t) (1 - \gamma)$$

where:

$ETI_t$  is an estimate of the taxable income for that regulatory year earned by a benchmark efficient entity.

$r_t$  is the expected statutory income tax rate.

$\gamma$  (gamma) is the assumed utilisation of imputation credits.

The gamma parameter identified in the Rules is the product of the value of imputation credits created as a proportion of their face value and the proportion of imputation credits that can be distributed. Gamma is estimated using the following formula:

$$\gamma = F \cdot \theta$$

where  $\gamma$  (gamma),  $F$  is the payout ratio and  $\theta$  (theta) is the value of imputation credits.

#### 13.2.2

##### ETSA Utilities' Original Proposal

In the Original Proposal, ETSA Utilities proposed that the value of gamma should be 0.5, which was the prevailing value applied by the AER prior to the SORI.

#### 13.2.3

##### The AER's Draft Determination and Response

The AER stated that it did not believe there to be persuasive evidence to justify a departure from the SORI value of 0.65. In summary, the AER concluded:<sup>398</sup>

- the arguments concerning an assumed 100 percent distribution rate, recognition of foreign investors, and limitations on theta inferred from tax statistics did not constitute new information;
- an assumed 100 percent distribution rate is consistent with the Officer framework and is appropriate given the difficulties in estimating the time value loss associated with retained credits;
- tax statistics are an appropriate proxy for theta;
- it had unresolved concerns with the work of Skeels and SFG, particularly surrounding multi-collinearity and filtering techniques;
- the study by Beggs and Skeels should not be labeled as a lower bound in the statistical sense; and
- 0.65 remains an appropriate estimate of theta.

ETSA Utilities has significant concerns with the position taken by the AER with respect to the value of imputation credits.

397 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 312.

398 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 276.

### Distribution rate

ETSA Utilities considers that it is inappropriate to adopt a distribution rate of 1. The empirical evidence strongly suggests a distribution rate significantly less than 1, and this must be taken into account by the AER in its overall estimate of gamma.

The AER's theoretical position is largely informed by that of Handley. In the Draft Determination, the AER relies upon the proposition by Handley that a 100 percent payout ratio is consistent with the Officer framework and classical valuation frameworks.<sup>399</sup> In relation to this view, ETSA Utilities makes the following observations:

- Professor Officer has already addressed the AER's treatment of his framework, noting that the Officer framework said nothing about the payout ratio other than to make a simplifying assumption for the purposes of academic analysis;<sup>400</sup> and
- It is incorrect to rely upon a classical valuation framework as a basis for assuming a 100 percent payout ratio. A system of dividend imputation is an entirely different framework to a classical tax system.<sup>401</sup>

ETSA Utilities notes that in response to an information request, the AER provided further advice it received from Handley.<sup>402</sup> This advice states that it is "irrational" to assume that some earnings would never be paid out. ETSA Utilities accepts that this is true, however it does not imply that all franking credits must be paid out. SFG Consulting provide a simple example as to why this may not be the case.<sup>403</sup>

In the Draft Determination, the AER stated in respect of the time which retained credits are held, "it is unaware of any empirical analysis that specifically explores the issue".<sup>404</sup>

NERA have conducted new empirical analysis of Australian Tax Office (ATO) statistics, which provide direct and observable evidence that clearly demonstrate the assumption of a 100 percent payout ratio is at odds with the actual behavior of firms.<sup>405</sup> A copy of this report is presented as Attachment I.1. There is no support on a theoretical or empirical basis to justify the continued assumption of a payout ratio of 100 percent. A theoretical assumption which is directly contravened by actual evidence cannot be relied upon where observable evidence indicates the contrary.

Calculation of the payout ratio is informed by consideration of what proportion of credits are paid out in any one year, what period retained credits are held for, and what discount rate is to be applied in respect of those retained credits.

For the purposes of the analysis contained in this response, it is sufficient that ETSA Utilities address the AER's assumption that retained credits are distributed over a period of 1 to 5 years. It is common ground that the estimate of Hathaway and Officer of 0.71 is a reasonable approximation of the payout ratio in any one given year.<sup>406</sup> In respect of the appropriate discount rate, ETSA Utilities refers to the work of Officer and NERA in considering that the cost of equity is the appropriate discount rate.<sup>407</sup>

NERA has conducted a new empirical analysis of ATO statistics, which consistent with what Hathaway and Officer find, shows that on average 68 percent of franking credits were paid out between 1996-97 to 2006-07.<sup>408</sup>

NERA's analysis demonstrates that the AER's assumption that 71 percent of credits are paid out immediately and the rest within five years is at odds with the evidence on the payout ratio of an average firm in the market.<sup>409</sup> The ATO statistics indicate that if 71 percent of credits generated were paid out immediately, and the remaining 29 percent were paid out within five years, one would observe a payout ratio far in excess of what one sees in the data. If the remaining 29 percent were paid out within one year, one would observe a payout ratio of 97 percent. If the remaining 29 percent were paid out within five years, one would observe a payout ratio of 89 percent. The ATO statistics show that, in practice, the ratio of credits distributed to credits created in any year is far lower – again, on average, only 68 percent.

Professor Officer's report similarly addressed the assumption that all retained credits are paid out within a 1 to 5 year period. Professor Officer stated:<sup>410</sup>

399 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 260.

400 R Officer, *Estimating the Distribution Rate of Imputation Tax Credits: Questions Raised by ETSA's Advisers* (23 June 2009).

401 NERA, *Payout Ratio of Regulated Firms* (5 January 2010) p 3.

402 J Handley, *Memorandum to the Australian Energy Regulator re Advice on Gamma to the 2010-2015 Qld/SA Electricity Distribution Determinations* (20 October 2009).

403 SFG Consulting, *Response to AER Draft Determination in relation to gamma* (13 January 2010) – paragraphs 78-83.

404 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 257.

405 The reasons for this include those identified by Mr Feros (eg, retaining capital to fund new investment, investor preferences for capital gains over income, and taxation rules limiting the ability of firms to payout credits).

406 AER, *WACC Review*, p 420.

407 ETSA Utilities notes that the AER considers that the appropriate rate is between the risk free rate and the cost of equity.

408 NERA, *Payout Ratio of Regulated Firms* (5 January 2010) p 6.

409 Note this does not require the payout ratio to be greater than 100%. On the basis of ATO data, a 97% payout ratio is consistent with all retained credits being paid within a year of being generated, not that all retained credits are paid out in any given year.

410 R Officer, *Estimating the Distribution Rate of Imputation Tax Credits: Questions Raised by ETSA's Advisers* (23 June 2009) p4. Note that the observation in footnote 13 is to be distinguished, as NERA's analysis considers what is necessary for retained credits to be paid out in a 1 to 5 year period on a rolling basis, and Professor Officer's analysis considers what the payout ratio would be required to be for all credits to be paid out in a 1 to 5 year period. In each case the empirical evidence is at odds with the AER's position.

*"unless it can be shown that a company's payout ratio exceeds 100% at least every five years and then by an amount that ensures the distribution of all the accumulated retained earnings and their associated franking credits, then the AER assumption is empirically at odd(s) with the facts. For example, if a company had a 70% dividend payout rate for four years the fifth year payout rate would have to be 220% to exhaust the company's franking account balance (FAB account). The magnitude of the payout required to meet the AER assumption that earnings are paid out within five years of being earned is far greater than any empirical evidence would support."*

In response to ETSA Utilities' information request, the AER stated that "[t]he range between one and five years was selected to reflect a retention of imputation credits reflective of the regulatory period".<sup>411</sup>

ETSA Utilities considers this to be a flawed approach, directly contradicted by empirical evidence. ETSA Utilities notes that it is common practice for regulators to observe certain parameters, such as the risk free rate, in the cost of capital calculation over the regulatory period. ETSA Utilities also acknowledges the GasNet principle, which requires WACC parameters to be estimated consistently so that the mathematical logic underpinning the CAPM is not undermined.<sup>412</sup>

However, the period in which credits are retained is an empirical question and it cannot simply be assumed that all credits would be paid out in a 1 to 5 year period because that corresponds with the regulatory period. The issue with the AER's analysis is that it starts from the proposition that 100 percent of retained credits will be paid over the regulatory period, before asking the appropriate question of what is the likely payout ratio over the regulatory period.

If this question were to be asked, the empirical evidence leads to a conclusion which cannot be disputed – the payout ratio must be less than 1.

The AER has not adequately addressed the significant practical restraints restricting the ability of firms to pay out retained credits identified in the Feros report ETSA Utilities submitted in conjunction with its Original Proposal.<sup>413</sup> ETSA Utilities accepts the AER's criticism of the Feros report that wastage of imputation credits is not a relevant factor in assessing the distribution rate. Nonetheless, the Feros report still correctly identifies constraints of practical significance, which restrict the ability of firms to distribute retained credits. The AER dismissed these actual constraints without proper consideration by stating that it could not predict what innovative financial activities a company may develop to pay out retained credits, and how the government may respond to such innovations.<sup>414</sup>

The AER has recognised a particular constraint facing ETSA Utilities' ability to payout retained credits in its treatment of equity raising costs. In the Draft Determination, the AER excluded capital contributions in calculating forecast dividends to be paid. This appears to have been because the AER considers that customer capital contributions are used to fund assets and those funds will not be available for distribution. Capital contributions generate an actual tax liability with associated franking credits and provide a unique example of the practical difficulty facing an electricity business such as ETSA Utilities.

Table 13.1 presents analysis using the figures advocated by the AER in the Draft Determination.<sup>415</sup> This analysis provides a unique example of why the payout ratio expected for a business such as ETSA Utilities should be less than 100 percent.<sup>416</sup>

**Table 13. 1: Impact of exclusion of capital contributions on maximum distribution rate**

	2010-11	2011-12	2012-13	2013-14	2014-15
Taxable Income—per PTRM (\$m nominal)	304.2	313.9	308.7	324.3	335.7
Less capital contributions (\$m nominal)	125.3	130.6	122.0	131.4	138.9
Taxable Income—excluding contributions (\$m nominal)	178.9	183.3	186.7	192.8	196.8
Imputation credits generated in total	91.3	94.2	92.6	97.3	100.7
Imputation credits generated by capital contributions	37.6	39.2	36.6	39.4	41.7
Distributable imputation credits	53.7	55.0	56.0	57.9	59.0
Maximum distribution rate	59%	58%	60%	59%	59%
Average maximum distribution rate	59%				

<sup>413</sup> P Feros, Review of WACC Parameters (22 June 2009).

<sup>414</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 259.

<sup>415</sup> ETSA Utilities' calculations suggest that using the numbers in the Revised Proposal the average maximum distribution rate is 55%.

<sup>416</sup> ETSA Utilities acknowledges that it may be appropriate for the AER to revise its approach in relation to equity raising costs to ensure consistency with the approach advanced by ETSA Utilities in relation to the distribution rate contained in this section of the Revised Proposal.

<sup>411</sup> AER, Response to ETSA Utilities information request dated 8 December 2009 (15 December 2009).

<sup>412</sup> See, *Application by GasNet Australia (Operations) Pty Ltd [2003] ACompT 6*, [46].

The empirical evidence and practical reality support a lower payout ratio than that advanced by the AER. However, ETSA Utilities recognises that retained credits will have some value and agrees with Handley and the AER that it is extreme to assume they have no value.<sup>417</sup> It is just as extreme to assume that they are fully valued. The fact that there are \$150 billion worth of credits in franking account balances<sup>418</sup> is symptomatic of the constraints firms face in paying out these credits, and is a stark representation of the overall value placed on imputation credits as a whole by the market. ETSA Utilities also notes that ATO statistics show a cumulative net increase in the levels of retained credits.<sup>419</sup>

ETSA Utilities believes the true value for the payout ratio on average lies between approximately 0.7 and 1. ETSA Utilities considers that since the empirical evidence suggests a payout ratio of greater than five years, and after taking into account the discounted value of retained credits and significant practical restraints, the true payout ratio is likely to be closer to 0.7 than 1. This must be taken into account by the AER in its overall assessment and estimate of gamma. ETSA Utilities considers that this position supports a gamma value of 0.50 and is inconsistent with the continued use of 0.65 by the AER.

## Theta

### Taxation statistics

ETSA Utilities maintains that statistics about franking credit redemption rates provide little information as to their value. This is supported by expert opinion, including that of Skeels.<sup>420</sup>

It is clear that this is a significant point of difference between ETSA Utilities and the AER. ETSA Utilities considers that taxation statistics can only provide an approximation on the upper bound (i.e. the maximum value) of the possible range of values for theta.

### Dividend drop-off studies

In support of its Original Proposal, ETSA Utilities engaged Associate Professor Skeels to review dividend drop-off work undertaken by SFG, which was conducted using the same approach as that in Beggs and Skeels (2006)<sup>421</sup>, but with an updated data set. This work specifically addressed concerns raised by the AER, for the first time, in the WACC Review Final Decision.

The Final Decision in the WACC Review presented a number of the AER's concerns with the SFG analysis, which were addressed by Skeels. Skeels evaluated each of the criticisms and found that they were either not substantiated by the evidence and / or have no material impact on the results.<sup>422</sup> ETSA Utilities did not accept the AER's basis for rejecting the results contained in the SFG study.

Despite this work, in its Draft Determination the AER stated that it still had a number of ongoing concerns with the SFG study, primarily in relation to the impact of multi-collinearity and the choice of filtering techniques.<sup>423</sup>

ETSA Utilities makes the following observations in respect of the AER's two chief criticisms:

- **Multicollinearity:** ETSA Utilities considers that the AER has overstated its concerns in relation to multicollinearity in the SFG study. In particular ETSA Utilities notes that the standard errors of the estimate do not suggest that multicollinearity represents any material concern. ETSA Utilities refers to the analysis contained in the Skeels and SFG reports.<sup>424</sup> The AER deemed the Beggs and Skeels (2006) market valuation of gamma to be sufficiently robust to adopt for the SORI. The issue of multicollinearity for the SFG market valuation is no different to the Beggs and Skeels (2006) market valuation.<sup>425</sup>
- **Filtering / data quality:** ETSA Utilities engaged Dr John Field, an independent statistician to prepare a statistically robust sampling methodology to be used to interrogate the SFG data set. A copy of Dr Field's report is presented as Attachment I.2. SFG subsequently conducted a rigorous sampling exercise. After a review of some 236 ASX announcements in relation to 150 observations, there is negligible change to the results previously reported by SFG.<sup>426</sup>

Skeels and SFG have fully addressed each of the AER's concerns discussed in the Draft Determination in Attachments I.3 and I.4 to this Revised Proposal. ETSA Utilities considers this to constitute new evidence that must be considered by the AER.

417 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 260.

418 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 260.

419 NERA, *Payout Ratio of Regulated Firms* (5 January 2010) p 6.

420 C Skeels, *Response to Australian Energy Regulator Draft Determination* (13 January 2010) section 2.

421 Beggs, D J and C L Skeels, 'Market Arbitrage of Cash Dividends and Franking Credits' *The Economic Record* (2006) 82 (258), pp 239-252.

422 C Skeels, *A review of the SFG dividend drop off study* (28 August 2009) pp10, 35.

423 AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 276.

424 C Skeels, *Response to Australian Energy Regulator Draft Determination* (13 January 2010) section 3.1; SFG Consulting, *Response to AER Draft Determination in relation to gamma* (8 January 2010) paragraphs 19-34.

425 C Skeels, *Response to Australian Energy Regulator Draft Determination* (13 January 2010) p 18.

426 SFG Consulting, *Response to AER Draft Determination in relation to gamma* (13 January 2010) p 17. Dr Field has provided specific observations in relation to the results obtained from the SFG sampling exercise. This document is also contained as an annexure to Attachment I.2.



No method for estimating the true future value of a financial parameter is perfect. The AER's estimation of the WACC parameters in the SORI necessarily relies on imperfect financial analysis. Similar concerns that the AER raises in relation to the SFG market valuation of gamma can equally be raised in relation the financial analysis underpinning the SORI. It would be inconsistent for the AER to disregard similar concerns in the SORI decision, but to dismiss the SFG analysis on the same basis. Skeels has indicated that the concerns raised by the AER are of little practical importance and that the SFG estimate is the most accurate estimate currently available.<sup>427</sup> This ought to provide the AER with sufficient comfort that the SFG estimate meets the criteria underpinning the SORI.

ETSA Utilities also notes that the AER has placed significant weight on the filtering technique used by CommSec in the creation of the data set used by Beggs and Skeels.<sup>428</sup> ETSA Utilities observes that this data set has not been subject to the same levels of interrogation and scrutiny as the one used by SFG. The primary basis for the AER's view are remarks by Skeels as to what is likely to have been done by CommSec. However, the AER has not interrogated this data set, examined the filtering techniques or scrutinised the data set in any shape or form. In contrast, the data set used by SFG has been rigorously examined in an open and transparent fashion. In ETSA Utilities' opinion, this level of transparency and scrutiny requires the AER to give further consideration to the results of the updated SFG analysis and their implications as to the value of gamma and the overall reasonableness of adopting a gamma value of 0.5.

ETSA Utilities notes that a response from the AER on a further information request made on 17 December 2009 is still outstanding.<sup>429</sup> This information request sought further clarification with respect to the AER's approach in undertaking a selective comparison of Bloomberg and SFG data. Depending on the nature of the AER response, ETSA Utilities reserves the opportunity to comment on that response.

#### Other methodological concerns

ETSA Utilities has significant concerns with the AER's approach in averaging the results obtained from ATO statistics and dividend drop-off estimates.

ATO statistics by construction must be an upper bound on the possible range of theta. Taxation redemption rates will only provide an insight as to what the maximum value of theta could be. ATO statistics do not contain any information about what an investor would pay for the imputation credit. To average a point estimate from a dividend drop-off study with the maximum theoretical value will create an upward bias by construction in the value of theta. ETSA Utilities considers that this is a more than a deficiency in methodology, it raises a fundamental question as to the reasonableness of the AER's decision.

This is an issue which is exacerbated by the fact that a figure obtained from ATO statistics will overstate the range, in as far as not accounting for the time value loss associated with the time between when a franking credit is generated, and when it is applied to offset a tax liability.

Therefore, ETSA Utilities considers that the effect of the AER's methodology creates an inherently upwards bias in the estimation of theta.<sup>430</sup>

#### 13.2.4

##### Revised Proposal

ETSA Utilities continues to advocate for a figure of 0.5 for the value of gamma. ETSA Utilities considers that it has sufficiently addressed the outstanding concerns of the AER, and that there is persuasive new evidence to depart from the SORI value.

ETSA Utilities' Revised Proposal should be accepted by the AER as:

- ETSA Utilities has demonstrated that there is direct and observable evidence demonstrating that the distribution rate is lower than 1 as currently applied by the AER;
- taxation statistics provide limited information on the market-based valuation of imputation credits;
- ETSA Utilities has presented what it considers to be the most thorough and comprehensive dividend drop-off analysis. This study has also been rigorously scrutinised in an open and transparent manner; and
- the AER has averaged the ATO statistics with a dividend drop-off study in a manner which will overstate the true value of theta.

ETSA Utilities considers its Revised Proposal to adopt a conservative and reasonable approach.<sup>431</sup>

ETSA Utilities notes the recent work of IPART. IPART recently conducted an independent review of the SORI value of 0.65. IPART noted that there was not sufficient evidence to warrant IPART departing from the view that the appropriate value for gamma was in the range of 0.30–0.50. IPART also observed that its practice has been to recognise:<sup>432</sup>

*"that the available evidence on gamma indicates that gamma lies somewhere between 1 and 0, with the greater amount of studies indicating that gamma should be towards the lower end of this range."*

ETSA Utilities also notes that the AER's own consultant has stated that "a reasonable estimate of gamma is within the range of 0.3 – 0.7"<sup>433</sup> Handley had also reached this view assuming a distribution rate of 1.

<sup>427</sup> C Skeels, A Review of the SFG Dividend Drop-Off Study (28 August 2009) p 5; C Skeels, Response to Australian Energy Regulator Draft Determination (12 January 2010) section 3.

<sup>428</sup> AER, Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15, (25 Nov 2009), pp 272-273.

<sup>429</sup> The AER advised that a response would be made by mid January 2010.

<sup>430</sup> ETSA Utilities refers to section 2 of C Skeels, Response to Australian Energy Regulator Draft Determination (13 January 2010).

<sup>431</sup> ETSA Utilities notes that it is not necessary for the AER to accept all of the points above to adopt a gamma value of 0.5.

<sup>432</sup> Independent Regulatory and Pricing Tribunal of New South Wales, IPART's cost of capital after the AER's WACC review, (November 2009) p 62.

<sup>433</sup> J Handley, A Note of the Valuation of Imputation Credits (12 November 2008) p 22.



#### **Revised Proposal**

*ETSA Utilities considers that the empirical evidence on the distribution rate and theta, as well as the views of the AER's own consultant, do not support the continued use of a gamma value of 0.65. The AER has chosen a value of theta at the upper end of the range advocated by its own consultant. A value of 0.5 is conservative, reasonable and consistent with a significant body of empirical evidence and expert opinion.*

## 13.3

### **DEBT RISK PREMIUM**

#### **13.3.1**

##### **ETSA Utilities' Original Proposal**

ETSA Utilities proposed that a simple average of the estimated yields reported by the Bloomberg and CBASpectrum services be used to measure the debt risk premium.

#### **13.3.2**

##### **The AER's Draft Determination and Response**

In making the Draft Determination, the AER undertook a comparison of what it termed the observed yields and fair values of a small sample of BBB+ corporate bonds from Bloomberg, CBASpectrum and UBS. The AER stated that it undertook this test in order to determine which service provides the "best available prediction of observed yields" for the purposes of determining the yield on the benchmark BBB+ 10 year corporate bond with respect to ETSA Utilities' averaging period. The AER concluded that the use of CBASpectrum's BBB+ fair value curve provided the best prediction for these purposes.<sup>434</sup>

In its Revised Proposal, ETSA Utilities accepts the AER's Draft Determination to measure the debt risk premium by reference solely to the CBASpectrum BBB+ fair value curve with respect to ETSA Utilities' averaging period.

However, in the context of recognising that the regulatory debate around the measurement of the debt risk premium will continue in relation to future regulatory proposals, ETSA Utilities makes the comments below.

ETSA Utilities has a number of significant concerns with the analysis conducted by the AER, and the basis upon which the AER determines in the Draft Determination that CBASpectrum provides the best available prediction of observed yields for the purposes of determining the yield on the benchmark BBB+ 10 year corporate bond with respect to ETSA Utilities' averaging period. ETSA Utilities does not consider that the "test" adopted by the AER is appropriate or robust.

ETSA Utilities commissioned a report from CEG, provided as Attachment I.5, to critique the AER's proposed methodology for testing whether the CBASpectrum BBB+ fair value curve, or the Bloomberg BBB+ fair value curve (as extrapolated by the AER) provides a better basis for arriving at an estimate of the observed annualised Australian benchmark corporate bond rate for corporate bonds with a BBB+ credit rating and a maturity of 10 years. This report takes as a given the broad parameters for the AER's proposed approach to testing the CBASpectrum and Bloomberg services, and identifies any areas where the approach could be improved.

ETSA Utilities also notes that given the opaqueness of the methodologies adopted by CBASpectrum and Bloomberg, together with the fact that these methodologies may change at any time without notification or explanation, there is a need to conduct a threshold "sense-check" of the relevant sources to test that they are reporting yields that are consistent with what may be expected given prevailing market conditions. Such a sense-check of the Bloomberg methodology during the period of the Global Financial Crisis would have revealed that during those market conditions, the Bloomberg service was reporting yields that were not consistent with the yields that could be expected given the prevailing market conditions. That is, the Bloomberg service performed poorly during this time. In this regard, ETSA Utilities refers to the report by PwC which, amongst other things, proposes a methodology to test whether the Bloomberg fair yield curves that the AER has relied on in previous determinations reasonably meets the legislative requirements.<sup>435</sup>

Finally, ETSA Utilities does not necessarily agree with the AER's interpretation of the Rule requirements relating to the cost of debt, in particular, its interpretation of "benchmark" in clause 6.5.2(e) as connoting efficiency of performance and not a bond rate that has "typical" or "usual" features.<sup>436</sup> While ETSA Utilities does not comment further on the AER's interpretation of the Rule requirements in its Revised Proposal, this should not be viewed as ETSA Utilities agreeing with the AER's interpretation of the relevant Rule requirements.

#### **13.3.3**

##### **Revised Proposal**

##### **Revised Proposal**

*ETSA Utilities has accepted the AER's Draft Determination to measure the debt risk premium by reference solely to the CBASpectrum BBB+ fair value curve with respect to ETSA Utilities' averaging period. ETSA Utilities notes that this does not mean it accepts the basis upon which the AER has concluded in the Draft Determination that CBASpectrum's BBB+ fair value curve provides the best available prediction of observed yields for the purposes of determining the yield on the benchmark BBB+ 10 year corporate bond with respect to ETSA Utilities' averaging period.*

434 AER, Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15, (25 Nov 2009), pp 330 – 338.

435 Pricewaterhousecoopers, Victorian Distribution Businesses: Methodology to Estimate the Debt Risk Premium, (November 2009).

436 AER, Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15, (25 Nov 2009), p 326.

# 13.4

## EXPECTED INFLATION

### 13.4.1

#### ETSA Utilities' Original Proposal

ETSA Utilities proposed to use the AER's methodology in the NSW Electricity Distribution Determination for determining the inflation rate. This approach involved adopting an average of the Reserve Bank of Australia's (RBA) short-term inflation forecasts and the mid-point of its target inflation band.

### 13.4.2

#### The AER's Draft Determination and Response

In its Draft Determination, the AER considered the most reliable 10 year inflation forecast to be a geometric average of the RBA short term forecasts (currently extending out two years), and the mid-point of the RBA's target inflation range for the remaining years in the 10 year period.<sup>437</sup>

The AER notes that historically it had used a Fisher equation approach to forecast the expected inflation rate – being the difference between the Commonwealth Government Securities (CGS) (nominal) and the indexed linked CGS yields.<sup>438</sup> The AER continues that, as a consequence of what the AER considers to be a decrease of index-linked CGS being traded in the market, there is an increased likelihood that the market for these securities is "poorly functioning".<sup>439</sup> The AER concludes that the use of the Fisher equation technique is likely to be unreliable at this point in time.<sup>440</sup>

The Draft Determination then makes reference to an announcement by the Australian Office of Financial Management (AOFM) that it will be issuing indexed linked CGS around late September / early October 2009.<sup>441</sup> In September 2009, issuance of Treasury index bonds was resumed, with further issuance of these bonds to the undertaken by tender over the remainder of 2009-10.<sup>442</sup>

The AER concludes in its Draft Determination that, while the yields from indexed CGS are likely to be unreliable for the purposes of the Draft Determination as a consequence of the limited supply of these securities, the AER will re-examine this issue for the Final Decision in light of the AOFM announcement.<sup>443</sup>

ETSA Utilities is concerned if the AER, having accepted in its Draft Determination the methodology adopted by ETSA Utilities in its Original Proposal for determining the inflation rate, sought to apply an entirely different methodology in the Final Decision. In the current circumstances, ETSA Utilities does not consider that it is open to the AER to reserve its decision on the methodology for determining the inflation rate to the Final Decision.

An important purpose of the Draft Determination is to inform the relevant service provider of the determination of the AER in relation to the service provider's Original Proposal. In response to the Draft Determination, a service provider is entitled to submit a revised regulatory proposal to the AER, which may incorporate the substance of any changes required to address matters raised by the Draft Determination or the AER's reasons for it.<sup>444</sup> The AER's Draft Determination does not require any changes to ETSA Utilities' Original Proposal in relation to determining the inflation rate.

### 13.4.3

#### Revised Proposal

##### Revised Proposal

*ETSA Utilities' Revised Proposal accepts the AER's Draft Determination on the methodology for determining the inflation rate. In these circumstances, ETSA Utilities does not consider that it is open to the AER in its Final Decision to adopt an entirely different methodology for determining the inflation rate from that proposed by ETSA Utilities, adopted by the AER in the Draft Determination, and accepted by ETSA Utilities in its Revised Proposal.*

<sup>437</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343.

<sup>438</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343.

<sup>439</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343.

<sup>440</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343.

<sup>441</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343.

<sup>442</sup> [http://www.aofm.gov.au/content/notices/24\\_2009.asp](http://www.aofm.gov.au/content/notices/24_2009.asp) (accessed 14 December 2009).

<sup>443</sup> AER, *Draft Decision South Australia: Draft distribution determination 2010-11 to 2014-15*, (25 Nov 2009), p 343 – 344.

<sup>444</sup> National Electricity Rules, clause 6.10.3(b).

# 13.5

## ETSA UTILITIES' PROPOSED WACC PARAMETERS

On the basis set out in this chapter, ETSA Utilities proposes WACC parameters that at the time of preparing its Revised Proposal deliver a nominal vanilla WACC of approximately 10.02%. In reaching this value, ETSA Utilities has adopted values for the WACC parameters as shown in Table 13.2.

With the exception of the gamma, the parameters used in the table below are from the SORI.

**Table 13.2: ETSA Utilities' proposed WACC parameters**

Parameter	Value <sup>(1)</sup>	Note
Nominal risk free rate	[5.37%]	
Expected inflation rate	[2.45%]	
Equity beta	0.80	Not revised from Original Proposal
Market risk premium	6.5	Revised from Original Proposal to adopt the market risk premium in the SORI
Gearing level (debt/equity)	0.60	Not revised from Original Proposal
Credit rating level	BBB+	Not revised from Original Proposal
Debt risk premium	[4.29%]	Revised from Original Proposal to be measured by reference to the CBASpectrum BBB+ fair value curve
Gamma	0.50	Not revised from Original Proposal
Nominal vanilla WACC	10.02%	

Note:

- (1) The numbers in brackets are indicative 'place holders' only. They reflect the values measured for the period ended 13 October 2009 and will be updated with data from the agreed averaging period..

