ETSA Utilities

Application for Review of 2005 – 2010 Electricity Distribution Price Determination – Part II

INTRODUCTORY COMMENTS

This part sets out the detailed grounds of review of the Determination. The accompanying Document Volumes set out information for the Commission's consideration on the Review.

Throughout the consultation prior to the Determination, ETSA Utilities raised various matters for investigation and consideration by the Commission. From the Determination it appears that the Commission has not investigated some of those matters or has not informed ETSA Utilities of any specific evidence on which it relies. Instead, it has rejected the information, previously provided by ETSA Utilities, for the Commission's consideration. In these circumstances, ETSA Utilities is obliged to put before the Commission information relating to those matters by way of statutory declaration so as to avoid being met with the criticism that ETSA Utilities has not put any further probative material before the Commission on this review.

In particular, for example:

(a) in relation to the issue of whether the $6 million allowance attributed to easements for the purpose of setting the initial tariffs was the outcome of an incomplete process and an inappropriate value for the purposes of the NEC and EPO, ETSA Utilities relies upon the statutory declarations of Mr Stevens, Mr Scarsella and Mr Nolan (Documents 58, 79 and 59 respectively);

(b) in relation to the circumstances of the privatisation of ETSA Utilities Pty Ltd's business and what was said to potential purchasers, ETSA Utilities relies upon the statutory declarations of Mr Scarsella and Mr Nolan (Documents 79 and 59 respectively);

(c) in relation to the value of the totality of ETSA Utilities' easements on a deprival basis, ETSA Utilities relies upon the statutory declarations of Ms Andrea Carolan of Maloney Field Services (Document 60) and Mr Holden (Document 61);

(d) in relation to the standard and accepted techniques that can and should be applied to market data to derive reliable historical proxy equity beta, ETSA Utilities relies upon the statutory declaration of Professor Gray (Document 68);

(e) in relation to the errors and inconsistencies in the Commission's analysis and recording of data and decisions relating to equity betas, ETSA Utilities relies upon the statutory declaration of Dr Hird (Document 67).

Insofar as these statutory declarations also relate to other matters, ETSA Utilities will rely on them for these purposes as well.

In addition, in its response to the draft determination, ETSA Utilities identified certain matters that it submitted should be considered and explicitly dealt with by the Commission. In many cases the Commission has not done so and has not given any reasons for this failure. ETSA Utilities reiterates its requirement that these matters, in so far as they relate to easements and equity beta, be dealt with explicitly on the review.

A EASEMENTS

1.1 In Section 9.5.4 of its Determination, the Commission has concluded that ETSA Utilities' easements in existence and in service at 1 July 1999 should be valued at $6 million[1] which was the value ascribed to easements for the purpose of establishing the tariffs for the initial regulatory period, 2000-2005, under the EPO.

1.2 This conclusion is vitiated by errors of fact and law:

(a) it is based on the factual error that the figure of $6 million was a complete valuation of the totality of ETSA Utilities' easements in existence and in service at 1 July 1999;

(b) it involves misconstructions and misapplications of the EPO and NEC;

(c) it is inconsistent with the nature and purpose of the regulatory regime applicable to ETSA Utilities;

(d) it is inconsistent with the reasonable expectations of potential purchasers created at the time of privatisation of ETSA Utilities Pty Ltd's business.

1.3 In fact, the totality of easements in existence and in service at 1 July 1999 had a value determined on a deprival basis (as required by the NEC) at that date of $224,450,000[2] and this is the value which ought, in accordance with the EPO and NEC, to be included in the regulatory asset base for the purposes of the 2005-2010 price determination.

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1 This is the figure originally applied for the purposes of determining the initial tariffs (which was based on the figure of $5.719 million appropriately indexed).

2 Valuation Report of Maloney Field Services of April 2005 (Document 60).

1.4 In order to understand how easements have been treated and why the EPO is in the form it is, it is useful to consider what occurred historically in relation to easements.

2 Chronology in relation to Easements

2.1 CONFIDENTIAL PARAGRAPH

3 Factual Error - $6 Million Allowance For Easements Was Not A Complete Valuation

3.1 From this and the detailed evidence of Mr Stevens it can be seen that the allowance of approximately $6 million in respect of ETSA Utilities' easements was not:

3.1.1 a valuation of all its easements, both deemed and registered;

3.1.2 a valuation of all its easements in relation to both electricity lines and other types of infrastructure;

3.1.3 carried out on any coherent basis so as to represent a legitimate or rigorous valuation of ETSA Utilities' easements.

3.2 To proceed on the basis that it was a proper valuation of the totality of ETSA Utilities' easements for the purpose of the 2005 price re-set is misguided, if not perverse. This is particularly so having regard to the obvious intention of clause 7.2(e)(iv) of the EPO that, because of the impossibility of appropriately valuing easements before the determination of the initial tariffs and the privatisation of ETSA Utilities Pty Ltd's business, the value of easements should be considered afresh in the 2005 price re-set.

3.3 To the extent that the Commission maintains that the "allowance" of approximately $6 million is a complete and appropriate valuation of ETSA Utilities' easements and bases its Determination on that figure, it is wrong.

4 Easement Valuation for the Subsequent Regulatory Period, 2005 to 2010 – EPO and NEC requirements

4.1 What the Commission must do in relation to asset values for the purposes of the 2005 to 2010 price re-set is governed by clause 7.2(e) of the EPO. That clause does not simply require that all asset values used in the initial regulatory period are to be used as a starting point and rolled forward. Nor does clause 7.2(e) provide that all assets are to be treated alike. This is not surprising given the problems with valuation on a deprival basis of some of the assets, including easements, at the time of privatisation.

4.2 For reasons which are obvious from the history of what occurred in relation to easement valuation, clause 7.2(e) distinguishes between two classes of assets:

4.2.1 assets that were valued by SKM in 1998-9 and which are listed in the Asset Schedule (Schedule 9 of the EPO). These are called the "fixed asset base" in clause 7.2(e);

4.2.2 "assets that are not included in the Asset Schedule but are necessary to enable ETSA Utilities to provide prescribed distribution services ... including, without limitation, the easements used by ETSA Utilities to provide prescribed distribution services"[3] (emphasis added). These assets had not been valued by SKM in 1998-9 (EPO Schedule 9 note 1). The only assets falling within this category that are of concern in this application for review are the easements.

4.3 In respect of the values of easements, and other assets not in the "fixed asset base", the EPO requires that consideration in the 2005 price re-set be given to those assets but gives no further direct guidance as to the nature of the required "consideration".

4.4 Nonetheless, the Commission and ETSA Utilities agree[4] that guidance is to be found in clause 6.10.3(e)(5) of the NEC[5].

4.5 Clause 6.10.3(e)(5) of the NEC relevantly requires that in administering the regime under which the revenues of Distribution Network Owners such as ETSA Utilities are to be regulated, the Commission is to seek to provide a fair and reasonable risk-adjusted cash flow rate of return on efficient investment where "*assets ... in existence and generally in service on 1 July 1999 are valued at a value determined by the Jurisdictional Regulator or consistent with the regulatory asset base established in the participating jurisdiction*" – see clause 6.10.3(e)(5)(ii).

4.6 Thus, as the Commission states at paragraph 9.5.3.2 (page 112) of the Determination, when considering the existing easements for the purposes of the Determination, the Commission should either:

4.6.1 use a value for the easements determined by the Commission; or

4.6.2 use a value for easements consistent with in the regulatory asset base (or RAB) established in South Australia.

4.7 The Commission has done neither and has thus fallen into error.

4.8 In the circumstances of the present case, it makes no difference under which limb of clause 6.10.3(e)(5)(ii) the Commission decides to proceed. On the proper construction and application of the clause, a deprival value for easements is required under both limbs.

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3 Clause 7.2(e)(iv).
4 Determination paragraph 9.5.3.2 page 112.
5 In addition, section B of Schedule 8 of the EPO provides some indication of how the required consideration might be carried out.

5 The First Limb of clause 6.10.3(e)(5)(ii)

5.1 If the Commission, when "giving consideration" to the valuation of easements for the purposes of clause 7.2(e)(iv) of the EPO, decides to value the easements under the first limb of clause 6.10.3(e)(5)(ii) it should, on the proper construction of clause 6.10.3(e)(5) of the NEC, value them on a deprival basis.

5.2 Clause 6.10.3(e)(5)(iii) requires regard to be had to the fact that deprival value is the preferred approach to valuing network assets (which includes easements) - see clause 6.10.3(e)(5)(iii)(A).

5.3 In determining the deprival value of easements, the Commission is directed by the NEC to, and should have regard to:

5.3.1 the Council of Australian Governments' Communiqué of 19 August 1994 (Document 45 and in particular Attachment A paragraph 3(b)).

5.3.2 the Guidelines on Accounting Policy for Current Valuation of Assets produced by the Steering Committee on National Performance Monitoring of Government Trading Enterprises of October 1994 (Document 1) ("the Guidelines") which deal with establishing the deprival value of land and, in particular, land under infrastructure (see, in particular, paragraphs 178 to 191).

6 The Second Limb of clause 6.10.3(e)(5)(ii)

6.1 If, on the other hand, the Commission chooses to apply the second limb of clause 6.10.3(e)(5)(ii) of the EPO, it is then required first to determine the basis upon which the rest of the regulatory asset base was established in South Australia and then to value the totality of the easements on a consistent basis.

6.2 A good exposition of the basis upon which ETSA Utilities' regulatory asset base was established is found in the South Australian Government's submission to the ACCC concerning the EPO (Document 47).

6.3 **CONFIDENTIAL PARAGRAPH**

6.4 **CONFIDENTIAL PARAGRAPH**

6.4.1

(a)

(b)

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6.4.3

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6.5 Thus, the ERSU submission establishes that the regulatory asset base (apart from the "allowance") was established in South Australia on a deprival value basis.

6.6 Thus, "a value ... consistent with the regulatory asset base established in the participating jurisdiction" in the circumstances of the present case means a value determined on a deprival basis.

6.7 Accordingly, if the Commission proceeds under the second limb of clause 6.10.3(e)(5)(ii) it must adopt a deprival value for easements for inclusion in the regulatory asset base for the purposes of the 2005 price re-set.

7 A Deprival Valuation of the Easements

7.1 A deprival valuation of the easements has been carried out by Andrea Carolan of Maloney Field Services. A copy of the report is Document 60.

7.2 This report establishes that the value of the easements (as at 30 June 1999) is $224,450,000 million on a deprival basis, as explained in the Guidelines[6]. Having regard to the amount effectively paid for the land and easements under the Distribution Network Land Lease of $276.2 million (Mr Scarsella page 8), it can be seen that such a deprival basis valuation involves no increase in value to ETSA Utilities which could legitimately be described as a windfall.

8 The Commission's Approach is Erroneous

8.1 To adopt, as the Commission has done, the "at cost" amount derived on the basis of incomplete data in relation to a minority of the relevant easements, because that amount was included in the asset base used to set revenue and prices for the initial regulatory period, is not to adopt a value that is "consistent with the regulatory asset base established" in South Australia, within the meaning of clause 6.10.3(e)(5)(ii) of the NEC.

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6 Guidelines on Accounting Policy for Current Valuation of Assets produced by the Steering Committee on National Performance Monitoring of Government Trading Enterprises of October 1994.

8.2 Such an approach involves treating the easements, which were not valued on a deprival basis and which were expressly not included in the Asset Schedule of the EPO, as if they were included in the Asset Schedule and as if the initial "at cost" amount satisfied the requirements of Clause 6.10.3(e)(5)(ii) and (iii) of the NEC and the requirements of the ACCC's draft statement of regulatory principles, which it does not.

8.3 The construction of clause 6.10.3(e)(5)(ii) inherent in the Commission's approach would involve a degree of regulatory absurdity. It is essential for regulatory purposes, when rolling forward the value of assets in accordance with principles such as those found in clause 7.2(e)(i) of the EPO, to ensure that the initial valuation is soundly based. The Queensland Competition Authority ("**QCA**") in its 23 December 2004 Draft Electricity Distribution Determination put it this way[7]:

> *The Authority is of the view that it is important to ensure that the initial valuation is soundly based having regard to the quantum and price of the regulated assets before adopting a roll forward approach to future valuations. ... In order to establish the necessary degree of confidence in the asset valuation for the regulatory period commencing 1 July 2005, the Authority decided to re-value the regulated asset bases of both distributors.*[8]

8.4 In fact, the Commission's approach is the opposite of what is envisaged under clause 7.2(e)(iv) of the EPO. Unlike the assets contained in the Asset Schedule which had been recently valued on a deprival basis, the existing easements had not been and could not, at the time of the preparation of the EPO and the privatisation, be valued consistently with the regulatory asset base specified in the Asset Schedule. For that

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7 QCA Draft Determination 23 December 2004 re Regulation of Electricity Distribution p. 54.

8 Similarly it may be noted that where there was an anomaly in the initial valuation of assets in the ACT, the ACT regulator, ICRC, in 2004 made an allowance to increase the regulatory asset base because certain assets had been inadvertently omitted. See the QCA Draft Determination 23 December 2004 re Regulation of Electricity Distribution p. 53.

reason, an "allowance" only was included in the initial asset base in respect of the easements and other items not able to be valued on a deprival basis and the EPO required the value of easements to be considered afresh in 2005.

8.5 Further, using a deprival basis for valuation for easements is consistent with clause 6.10.2(g) and clause 6.10.3(e)(6)(iv)(A) of the NEC, which require the pre-existing policies of the Government and their initial asset valuation decisions to be taken into account. The policies and decisions in respect of the valuation of network assets are manifested in, amongst other places:

8.5.1 the ERSU submission to the ACCC referred to above (Document 47 pages 20 - 21); and,

8.5.2 the approach to valuation adopted in relation to the fixed asset base established in the EPO and the provisions of clause 7.2(e)(iv) itself, which require that, rather than the easements being rolled forward, as are the assets that had already been valued on a deprival basis, the value of easements should be considered afresh at the 2005 price re-set.

8.6 Finally, valuing the existing easements on a deprival basis, since it yields an indication of the efficient cost of providing the asset, is also consistent with the approach to valuation inherent in clauses 6.10.2(b)(2), 6.10.3(e)(5) and 6.10.5(d)(6) of the NEC which require a fair and reasonable return on "efficient investment", including sunk assets, to be provided. It is also consistent with the provisions of section B of Schedule 8 of the EPO[9].

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9 Clause B1.5(c) provides that an appropriate valuation of an asset will be one that reflects "the efficient cost of providing the asset". This is consistent with the valuation methodology that underlies the values in the Asset Schedule of the EPO and with clause 7.2(k)(i) of the EPO.

9 Misapplication of clauses 6.10.2(g) and 6.10.3(e)(6)(iv)(A)

9.1 The Commission has misapplied clauses 6.10.2(g) and 6.10.3(e)(6)(iv)(A).

9.2 At paragraph 9.5.3.2 (page 113) of the Determination, the Commission argues that adopting the "allowance" for easements used to determine the initial tariffs under the EPO is giving "reasonable recognition of pre-existing policies of governments which are Distribution Network owners regarding distribution asset values ..." under clause 6.10.2(g) and is having regard to "the initial asset valuation decisions made by a government ... in the context of industry reform ..." under clause 6.10.3(e)(6)(iv)(A).

9.3 In so far as clause 6.10.2(g) is applicable in the present case, the pre-existing policies and decisions of the South Australian Government were:

9.3.1 that the assets of ETSA Corporation and its successors should be valued on a deprival basis – see Note 31 to the 1994-5 Accounts of ETSA Corporation attached to Mr Stevens' statutory declaration (Document 58);

9.3.2 that although the easements had been included in the initial asset base at "book value" since asset valuations on a deprival basis had not yet been undertaken, easements were to be valued on a deprival basis later. This is the substance of ERSU's submission to the ACCC (Document 47 pages 20-21) on behalf of the South Australian Government. It is also what underlies clause 7.2(e)(iv) of the EPO. Clause 1.11 of the EPO requires the EPO to be interpreted consistently with the NEC.

9.4 The Government's policy was <u>not</u> that easements should continue to be valued at the initial "allowance".

9.5 Adopting the initial "allowance" for easements for the purposes of the 2005 price re-set is not giving reasonable recognition to the Government's policies but is rather to ignore them.

9.6 Similarly, for clause 6.10.3(e)(6)(iv)(A), the Government's decisions in relation to valuation of assets included:

9.6.1 that all assets should be valued on a deprival basis;

9.6.2 only because easements had not yet been so valued was the "allowance" used for setting initial tariffs;

9.6.3 on the 2005 price set, easement values should be revisited.

9.7 Accordingly, if the Commission persists in using the initial "allowance" for easements for the 2005 price re-set, it will not be giving effect to clause 6.10.3(e)(6)(iv)(A).

10 Commission's Determination Inconsistent with Regulatory Regime

10.1 It is fundamental to the regulatory regime established under the NEC[10], the EPO[11] and the *Electricity Act*[12] in relation to electricity distribution, that ETSA Utilities or any other electricity distributor in South Australia should be given a fair and reasonable return on the efficient cost of providing the assets employed in the distribution network service business. To this end, the assets valued must include, among other things, all of ETSA Utilities' easements in use at 1 July 1999, and the valuation must be on a basis

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10 NEC clauses 6.10.2(b)(2), 6.10.3(e)(5) and 6.10.5(d)(5) and (6).

11 EPO clauses 7.2(c) and (e) and note the provisions of section B of Schedule 8 of the EPO and in particular clauses B1.2(d), B1.5(a)(i), B1.5(c) and B2.1(b) (which specifically requires that the revenue control for a new distributor in the initial regulatory period must be designed to ensure that neither the new distributor nor ETSA Utilities obtains a material commercial advantage over the other as a result of the revenue control methodologies). Thus, in this context and in accordance with clause B1.5(c) an appropriate valuation of an asset will be one that reflects "the efficient cost of providing the asset".

12 Section 6A(4).

that establishes the efficient cost of providing the assets in question, consistent with the requirements of the NEC and the EPO.

10.2 The $6 million figure applied in relation to easements in order to set the initial tariffs (based on the "at cost" figure for "registered easements" in the accounts of ETSA Utilities Pty Ltd) does not take account of all easements used by ETSA Utilities to provide prescribed distribution services in existence and in service at 1999. Nor, does it represent the efficient cost of providing any or all of those easements.

10.3 Adoption of the valuation of all of ETSA Utilities' easements on a deprival basis consistent with the Guidelines, which does not involve any windfall for ETSA Utilities, is entirely consistent with the purpose and nature of the regulatory regime applicable in the present case.

11 Commission Approach Inconsistent with Reasonable Expectations

11.1 At paragraph 9.5.3.5 (page 117) of the Determination the Commission has stated:

> *"For completeness, the Commission also notes that it has twice confirmed with the South Australian Government its understanding that there are no records of representations made to bidders that there would be an "upside" in the treatment of the value of easements and substation land by regulators in the future."*

11.2 **CONFIDENTIAL PARAGRAPH**

11.3 **CONFIDENTIAL PARAGRAPH**

11.4 **CONFIDENTIAL PARAGRAPH**

11.5 **CONFIDENTIAL PARAGRAPH**

11.6 For the first regulatory period from 2000 to 2005, the EPO (subject to a limited potential for re-opening) determined the relevant returns and tariffs. Thus it eliminated significant risk for potential purchasers as to their likely return on their investment in that period. As a result, for the period 2000 to 2005 it did not especially matter to prospective purchasers what the assets were valued at, the returns and tariffs having already been determined by the EPO.

11.7 **CONFIDENTIAL PARAGRAPH**

11.8 **CONFIDENTIAL PARAGRAPH**

11.9 **CONFIDENTIAL PARAGRAPH**

11.10 **CONFIDENTIAL PARAGRAPH**

11.11 If the Commission persists in its current Determination in relation to easements, this reasonable expectation will be defeated, the regulatory compact will be breached and regulatory uncertainty in South Australia will be increased with the attendant adverse consequences for the State.

12 Conclusion

The Commission should adopt the deprival method of valuation for the totality of ETSA Utilities' easements in order to comply with the requirements of the EPO and the NEC. Such a method (properly understood and applied) yields a valuation as at 1 July 1999 of $224,450,000 million for easements in existence and in service at that date.

B. EQUITY ß

The Commission has determined that the appropriate equity ß to be used under Schedule 10 of the EPO is 0.8. This is wrong. It is both incorrect and unreasonable to set an equity ß of less than 1. ETSA Utilities seeks a review of this aspect of the Determination. This part of the review identifies the correct approach to determining equity ß, and identifies the Commission's errors.

13 The Legal Requirements

13.1 In determining the appropriate equity ß (defined in Schedule 6.1 to Chapter 6 of the NEC as "the measure of the extent to which the return on a given equity investment moves with the return on the equity market"), the data to which the Commission must have regard falls into three broad categories:

13.1.1 market data on equity ßs reflecting "prevailing conditions in the market for investments having a similar nature and degree of business risk as those faced by ETSA Utilities" - clause 6 of Schedule 10 of the EPO; and the ß factors of listed companies (in Australia and overseas) which have business risk profiles and capital structures similar to those of Australian network owners – clause 3.3 of Schedule 6.1 of the NEC;

13.1.2 the equity ß adopted in the EPO and the equity ßs adopted in regulatory decisions of other jurisdictional regulators responsible for regulating distribution service pricing and other Australian regulatory decisions - clause 6.10.3(e)(6)(iv)(A), (B) and (C) of the NEC and clause 7.2(k)(ii) of the EPO; and,

13.1.3 any relevant international benchmarks for returns on assets in private sector industries comparable to those in which ETSA Utilities operates – clause 7.2(k)(ii) of the EPO.

13.2 In having regard to each of these categories of material, the Commission is required to give proper, genuine and realistic consideration[13] to these matters, which consideration must be evident on the face of the reasons for review (unlike the reasons for the Determination where no such consideration is evident).

14 Overview

14.1 The Australian market data, properly analysed, Australian regulatory precedents and international benchmarks all show a ß of or very close to 1.0.

14.2 In wrongly determining an equity ß of 0.8, the Commission has relied almost entirely upon mechanical, unanalysed, market data of historical proxy ßs of Australian listed companies stated to be comparable to ETSA Utilities. The treatment of other regulators' decisions is brief and incomprehensible, and the evidence of overseas benchmarks is either ignored, misunderstood or incorrectly recorded by the Commission.

15 Market Data

15.1 In its Determination the Commission has acknowledged it is "cognisant of the statistical error" (page 135) in the ß estimates derived from market data that it purports to rely upon, but then does nothing to correct or account for that error.

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13 Khan v Minister for Immigration and Ethnic Affairs (1987) 14 ALD 291 cited, eg, in Williams v Minister for the Environment and Heritage [2002] FCA 535 at [25].

15.2 It is almost universally acknowledged in Australian regulatory decisions that, at present, mechanical, unanalysed market data by itself is insufficiently reliable for the purposes of determining an equity ß for use in the CAPM.

15.3 The broad options for the Commission, therefore, are either to:

15.3.1 acknowledge that lack of sufficient reliability, and adopt an equity ß in the order of 1.0 in line with regulatory precedent (as explained below) and with qualitative considerations, such as asymmetric risk of regulatory error. This is the approach of most Australian regulators; or, alternatively

15.3.2 apply standard and well-known statistical techniques to render the data sufficiently reliable for these purposes. Such an exercise has been undertaken in the Gray/Officer report (Document 68).

15.4 The Commission has taken neither approach. Instead, it has done what it must not do, namely, use unreliable, unanalysed mechanical data to determine the equity ß for the purposes of the CAPM.

15.5 ETSA Utilities submits that if the second approach is undertaken, then the conclusion to be drawn from the observable and reliable market data, analysed in a methodologically sound and commercially realistic manner, is that an equity ß that reflects prevailing conditions in the market for investments having a similar nature and degree of business risk as those faced by ETSA Utilities will be determined to be not be less than 1 (assuming 60% gearing) – see in particular section 5 of the Gray/Officer Report.

15.6 The unreliable and unanalysed historical proxy ß evidence has been significantly misused by the Commission. The proper approach to analysis of this material and the analysis itself is set out in the Gray/Officer report.

15.7 Paragraph 10.8.1.3 of the Determination - "Statistical Imprecision of Historical Data" – demonstrates that, in this regard, the Commission has misunderstood an earlier report of Professors Gray and Officer (Document 77). In that report Professors Gray and Officer addressed the question whether a basic, mechanical analysis of data, such as that now relied upon by the Commission in making its decision, could produce a statistically and economically reliable ß estimate. They concluded it could not. The Commission's misconceptions about the earlier Gray/Officer report are comprehensively disposed of in paragraphs 1.8 – 1.10 of their new report (Document 68).

15.8 As the second Gray/Officer report (Document 68) demonstrates (after considering the theory of measurement of equity ß), the most statistically and economically reliable approach to analysing the observable market data is to:

15.8.1 reject any single approach which is based on a very small data set;

15.8.2 use a range of recognised empirical techniques and data sources such as:

(a) the Ordinary Least Squares regression approach;

(b) the Scholes-Williams adjustment for non-synchronous trading;

(c) the Blume adjustment for non-persistent estimation error;

(d) removal of influential outliers, and unrepresentative market events such as stock market crashes and "bubbles";

(e) use of a variety of data sets; and

(f) computing portfolio ß figures.

15.9 They also note that it is necessary to apply a series of qualitative considerations to any results, namely:

(a) testing them against commercial common sense and economic reasonableness;

(b) requiring a higher degree of regulatory confidence before adopting a lower rather than a higher ß because of the asymmetric risk of regulatory error; and

(c) comparing the ß estimate with those in other, comparable jurisdictions.

15.10 Applying this approach the result is as stated in the Gray/Officer report namely, that "*All of the empirical techniques we examine, when properly applied to a range of market data sources, lead us to the conclusion that the appropriate equity beta for an Australian energy distribution business (with 60% gearing) is at least one. An equity beta estimate of 0.8 is unreasonable in light of the empirical evidence and the purpose for which it is to be used.*" (paragraph 1.19 of Document 68)

16 The Commission's Initial Analysis

16.1 Unlike the approach in the Determination, the Commission's initial approach was to take the first of the two approaches set out above.

16.2 This was done in section 5.3 of the Return on Assets – Preliminary Views paper published in January 2004 (Document 56). The conclusion reached by the Commission was that the observable data should not be taken at face value, nor be relied upon to establish an equity ß for ETSA Utilities of less than 1. This conclusion took into account the statistical imprecision of the ß estimates, the changing composition of the

proxy group, the variations in individual ß estimates, and concern that an equity ß of 0.3 (assuming 60% gearing) might well reflect a short-term aberration and might be considered implausibly low (pages 53 to 59 of the Preliminary Views paper, Document 56).

16.3 Significantly, the Commission then noted:

> *"For the purposes of setting regulated charges for the period between July 2005 and June 2010, ESCOSA considers that in the absence of convincing market data ... the long term interests of consumers would be best served by adopting an assumption about the equity ß that is consistent with that adopted by other regulators".* (Document 56 page 58).

16.4 There is no error in such an approach. It should have been maintained.

16.5 Even though it now relies upon analysis by the Allens Consulting Group ("**ACG**"), the Commission has presented no further analysis since January 2004 that would yield "convincing market data". (Any such further data or analysis yielding the data would, in order to ensure procedural fairness, have needed to be revealed to ETSA Utilities. The recent letters from the Commission to ETSA (Documents 81 and 84) assure ETSA Utilities that all relevant material has already been revealed to it in the Determination.)

16.6 The proper analysis of the market data has now been undertaken in the second Gray/Officer report.

16.7 The Commission should either accept the result revealed by the Gray/Officer analysis and adopt its conclusion that an appropriate equity ß would not be less than 1; revert to its initial position that there is an absence of convincing market data, and adopt a ß of 1

as other regulators have done; or accept the conclusions from ACG's analysis upon which it purports to have relied.

17 The ACG Analysis

17.1 Between the time of the *Return on Assets - Preliminary Views* paper of January 2004 and the draft determination published in December 2004, the Commission changed its view on the appropriate equity ß for ETSA Utilities. By the time of the draft determination the Commission had formed the view that the appropriate equity ß was 0.8. This conclusion has been maintained in the Determination.

17.2 The new material considered by the Commission in this period between January and December 2004 forms the foundation of what appears in paragraph 10.6.5 of the Statement of Reasons for the Draft Determination and paragraph 10.8.2.1 of the Statement of Reasons for the Determination. The new material appears to have been "ACG analysis and data obtained from Bloomberg" (see the notations to Table 10.2, Figure 10.3 and Figure 10.4 of the Statement of Reasons for the Draft Determination and Table 10.2, Figure 10.3 and Figure 10.4 of the Determination).

17.3 It is significant that this material appears to be relevantly the same as the material presented by ACG to the QCA in the ACG report dated December 2004 entitled "Queensland Distribution Network Service Providers – Cost of Capital Study" ("the ACG Report") (Document 23)[14].

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[14] In fact:

(a) Figures 6.2 and 6.3 of the ACG Report and Figures 10.3 and 10.4 of the Commission's Statement of Reasons respectively appear to be based on the same material, although the format of the graphs varies slightly. They all bear the notation that they are the result of ACG analysis and Bloomberg data;

(b) Table 6.2 of the ACG Report and Table 10.2 of the Commission's Statement of Reasons respectively each relate to the same group of companies and a similar type of information is conveyed although the ACG Report identifies time frames for the results,

17.4 Given that the Commission has had access to and has in many respects adopted ACG's analysis, the Commission should also have adopted the further reasoning and the conclusions of ACG at paragraph 6.9, pages 50 to 51, of the ACG Report[15], including in particular:

> "*We believe that the equity beta of the average Australian DNSP [Distribution Network Service Provider] is 1.00 assuming 60% gearing*".

17.5 The Commission must have known of, but has not acknowledged, the ACG conclusion, nor identified any ground or reason for rejecting it. The ACG conclusion is only consistent with the correct equity ß for a South Australian electricity distribution business being not less than 1.

18 The Commission's flawed market data conclusions

18.1 Even if it were permissible to base a conclusion on mechanical, unanalysed market data such as is presently available (which it is not), the Commission's analysis and conclusions are still erroneous.

18.2 The errors are identified by NERA in their reports: see NERA 3.4 (Document 67). Each should be addressed by the Commission in this review.

18.3 For example, the Commission states "if it were to have regard exclusively to the latest market evidence, it would adopt a re-levered beta of approximately 0.3" (page 140).

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whereas the Commission's table does not. The Commission's tables bear the notation "ACG analysis, data obtained from Bloomberg", and the ACG tables are notated "Source: Bloomberg".

15 To see how consultants' analysis of the market data in relation to equity ß has developed over the period from mid 2002 to late 2004 it is useful to compare the ACG Report to the QCA of December 2004 to the ACG Report to the ACCC "Empirical Evidence on Proxy Beta Values for Regulated Gas Transmission Activities". This is annexed to Professor Gray's statement.

The 0.3 figure cited is wrong and is nowhere explained in, nor supported by the material in, the Determination: NERA 3.4.2 (Document 67).

18.4 The Commission also stated that 0.8 with 60% gearing "is at the upper end of observed equity ß, however measured, over the past 4 years" (page 142). This statement is also wrong: see NERA 3.4.2 (Document 67).

19 The Q-factor

19.1 In its Determination, ESCOSA has considered variations in revenues due to variations in energy distributed. The following three sentences provide the full extent of ESCOSA's analysis in the Determination:

> "*A further issue that the Commission has had regard to is the likely impact of the Q-factor in setting annual prices for ETSA Utilities. The introduction of the Q-factor stabilises ETSA Utilities' revenues due to fluctuations in sales (beyond the ±0.5% band). The introduction of the Q-factor has the impact of reducing volatility in ETSA Utilities' annual returns and consequently ETSA Utilities' systematic (non-diversifiable) risk*". (page 142).

19.2 This portion of the Determination, which is, given its location, apparently an important part of the Commission's reasoning on equity ß, is empirically and conceptually unconvincing, as demonstrated by NERA. Their detailed reasons are found at 3.10 in their report (Document 67). The Q factor does not provide any justification for adopting an equity ß of less than 1.

20 Market Data - Conclusion

20.1 In the light of the Commission's own, initial analysis of market data, the analysis and assessment of market data by its consultant, ACG, the Gray/Officer report's analysis and material provided by NERA, the conclusion that the equity ß applicable to ETSA Utilities should be at least 1.0, is overwhelming.

21 Conclusion from Other Relevant Regulatory Decisions – Equity ß (60% gearing) not less than 1

21.1 As already noted, the Commission is bound to have regard to decisions made by other Jurisdictional Regulators, the need to promote consistency in regulation with other jurisdictions, and the need for reasonable certainty and consistency over time of the outcomes of regulatory processes: NEC clauses 6.10.2(j), 6.10.3(e)(6) and s 6(b)(vii) of the ESC Act. The consideration of those matters, of course, must be proper, genuine and realistic, not cursory or obscure.

21.2 Other relevant Jurisdictional Regulators' decisions and decisions of the ACCC relating to private sector businesses in the energy sector have, without exception, adopted an equity ß of or about 1 (assuming 60% gearing). For the Commission to adopt an equity ß for ETSA Utilities of anything less than 1 (assuming 60% gearing), without any, let alone, any compelling reasons, is unjustifiably inconsistent with those decisions.

21.3 Until its Determination, the Commission considered it important to locate ETSA Utilities' equity ß within the range of comparable ßs set by other Australian regulators[16]. Since the Commission's draft determination it has become clear that the

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16 In publishing its Preliminary Views (Document 56) the Commission recognised the imperative to follow the equity ß set by other regulators, absent "convincing market data": page 58. In its Draft Determination it stated "*...as discussed above, regulators have adopted a range of*

range of regulatory decisions is much higher than the Commission previously thought so the equity ß adopted now falls well below that range. It appears that as a result, the Commission has chosen to ignore the range of regulatory precedent. Such a change is telling.

21.4 In its Determination the Commission sets out a table of recent equity ß determinations of Australian regulators, noting privately owned firms, and sets out the entirety of its analysis of this data in the sentence:

> "*The Commission considers that recent decisions of other regulators provide insight into the parameters consistent with prevailing market conditions for the relevant regulated entities*".

Whatever this Delphic sentence may mean, it does not contain or evidence proper, genuine or realistic consideration of other regulators' decisions or explain its departure from its previous approach. An available inference to be drawn from this unexplained departure is that the approach of the Commission in the draft determination of placing its equity ß determination in the range of other Australian regulators has been abandoned as it now finds its desired estimate unjustifiably below that range.

21.5 NERA (Document 67, 3.6) explains why (as the Commission formerly accepted) regulatory precedent for fully privatised regulated businesses provides an important indication of current market conditions in equity markets[17]. This should be accepted by the Commission and applied by it on this review.

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between about 0.7 and 1.2, with many adopting 1 (or approximately 1). The Commission considers that a value that is within the range adopted by regulators is appropriate, but also considers it appropriate to place weight on the market evidence of betas".

17 Both because ETSA competes with these firms for equity funds and because equity betas adopted by regulators reflect their assessment of the risks attached to regulated energy businesses.

21.6 NERA also demonstrates (Document 67, 3.6) that the Commission's table 10.3 in its Determination does not adequately represent regulatory precedent because:

21.6.1 although it now includes the QCA's 2001 revised decision for electricity distribution (as an equity beta of 0.9[18] instead of 0.71 as was recorded in the draft determination), it continues to report ranges of values considered by regulators rather than the actual values adopted by regulators;

21.6.2 it incorrectly reports the range considered by the SA Government at the time of ETSA's privatisation (as 0.83 – 1.20 instead of 1.04 – 1.20, assuming 60% gearing); and

21.6.3 it makes no attempt to adjust for differences in underlying risk when reporting or interpreting regulatory precedent.

21.7 The Commission should adopt NERA's conclusions (Document 67, 3.6) that, properly determined, the widest range of relevant regulatory precedent for equity beta is between 0.97 and 1.20 and that the most appropriate range of regulatory precedent is narrower, including only fully privatised electricity companies, and is between 1.0 and 1.13.

21.8 An equity ß of 0.80, as determined by the Commission, falls well below this range[19], a matter now ignored by the Commission.

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18 This figure is only applicable to DNSPs subject to the particular regulatory regime in Queensland. The QCA accepts ACG's conclusion that for DNSPs in the "southern states" the equity ß should be 1.

19 It should be noted that merely falling within a range and in particular a broad range does not confer validity in a particular equity ß estimate. Falling outside a range on the other hand is informative and indicates that the equity ß estimate is unlikely to be appropriate absent cogent explanation. As ETSA Utilities said in its submission on the Draft Determination (Document 77, page 15): "It is fundamentally wrong where a regulator identifies a range for the purposes of ascertaining equity beta to say that any value within that range has equal integrity and credibility. In fact, at the extremities of the range there are lower levels of confidence and at the mid point of the range higher levels of confidence. As a result, in the instances where ESCOSA has relied upon a range, it has done so by ignoring the actual value of equity beta which was derived from that range". NERA has used or determined actual values of individual regulators in determining the range.

22 ACCC Report

22.1 The latest relevant decision by the ACCC was made as recently as 8 December 2004 and is contained in its final *Statement of Principles for the Regulation of Electricity Transmission Revenues* (Document 42). There, as a principle of general regulatory application, the ACCC decided to continue to adopt an equity ß of 1 for the comparable situation of electricity transmission network service providers[20].

22.2 The Commission has no justifiable basis for departing from the ACCC's Statement of Principles in relation to equity ß.

23 Conclusion from Previous SA Government Decision – Equity ß (60% gearing) of 1.13

23.1 In determining the applicable ß, the Commission is required, by clause 6.10.3(6)(iv)(A) of the NEC, to have proper regard to the relevant previous regulatory decisions made by authorised persons, including the initial revenue setting decisions made by the South Australian Government at the time at which that Government was a Distribution Network Owner in the context of industry reform pursuant to the Competition Principles Agreement. These decisions are reflected in various places, including in particular the equity ß adopted in determining the revenue and prices under the EPO[21].

23.2 **CONFIDENTIAL PARAGRAPH**

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20 This is done having regard to all relevant circumstances and the requirements of the NEC (which are substantially the same for transmission and distribution network service providers in relevant respects) – see Part 8 on Cost of Capital and in particular paragraph 8.5 on equity ß, the conclusion that an equity ß of 1 should be applied is found at paragraph 8.5.7.

21 Under section 35B(1)(c) of the *Electricity Act* the EPO has to be consistent with the NEC and had to be approved by the ACCC.

23.3 In the light of the requirements of the NEC, if the Commission is to depart from the relevant parameters (including the ß) adopted by the Government in establishing the EPO, there must exist cogent reasons for doing so. In the absence of such cogent reasons, the initial setting should be given substantial weight in determining the equity ß for the ensuing regulatory period. The legislative framework requires SA regulatory precedent to be given greater weight than interstate or international precedent. Absent cogent reasons to the contrary of which there are none[22], that precedent should be taken into account and the equity ß set at not less than 1.

24 Regulatory Decisions and Comity

24.1 Decisions by the ACCC and the QCA ought be followed by the Commission unless there are compelling reasons to the contrary, as:

24.1.1 each of the ACCC and the QCA[23] (in relation to electricity supply) are performing an almost identical function in relation to the calculation of equity ß to the Commission (in relation to distribution). The NEC requires regulatory decisions to be consistent;

24.1.2 the persuasiveness of the reasoning of the ACCC and the QCA demands respect and should be followed;

24.1.3 as a matter of comity they ought be followed by the Commission. The approach of the High Court held in Australian Securities Commission v

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22 The Q factor would not justify any move in the equity ß from 1.13 to below 1, if any movement were justified at all on this basis (which is not the case). Otherwise, the systemic risk associated with the regulated part of ETSA Utilities' business has not changed significantly between 2001 and 2005. Accordingly, unless there was some obvious and egregious error on the part of the SA Government in setting the equity ß for the regulatory period 2001 to 2005, there is no reason to depart from an equity ß in the region of 1.13 (with gearing of 60%) as determined by the SA Government.

23 See footnote no. 19.

Marlborough Goldmines Limited (1992) 177 CLR 485 is applicable by close analogy[24];

24.1.4 the decision of the Commission to abandon its earlier approach that ß should fall within the range of other Australian regulators is unexplained and appears unprincipled, as noted above.

24.2 The Commission's adoption of an equity ß for ETSA Utilities of less than 1 is inconsistent with the requirements of the NEC, and s 6(b)(vii) of the ESC Act.

International Benchmarks

UK regulatory precedent

24.3 At page 142 of its Determination, the Commission relies upon what the Commission describes as the recent decision of the United Kingdom energy regulator Ofgem to adopt an equity ß range of 0.6 – 1.0. This draft range is referred to incorrectly. The equity ß range referred to by Ofgem is in fact 0.75 – 1.0 when gearing is taken into account.

24.4 The Commission then states:

> "*Given the UK Regulator's decision ... the Commission believes that the beta of 0.8 is not inconsistent with international benchmarks*". (Page 142 Document 9)

24.5 The Commission, however, quotes from Ofgem's draft decision. Its final decision, as NERA explains, was to adopt an equity ß of 1. (The final decision is attached to NERA's report (Document 67).) The Commission's ß of 0.8 is thus inconsistent with

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24 Uniformity of decision making in the interpretation of a uniform national law is a sufficiently important consideration to require that another court - albeit not one in the same hierarchy -

this international benchmark and thus its reasoning in this regard cannot stand. This is yet a further basis upon which the Commission's decision must be reviewed.

US data

24.6 The Commission argues that US data presented by NERA in its first report, which establishes that an appropriate equity beta would be in the order of 1.03, generally cannot be used because it uses the discounted cash flow (DCF) or Dividend Growth Model not CAPM.

24.7 As NERA explains, this dismissal of the US data supporting an equity beta of at least 1 is wrong and misconceived. There is no inconsistency between DCF and CAPM. A reliable equity ß can be "backed out" of the US data, as NERA demonstrate, making it clear that US utilities have equity ßs of 1 or more: NERA 3.5.2 (Document 67).

25 Asymmetric Risk

25.1 Finally, the Commission must take into account that there is a risk that the equity ß set may be wrong. The harm to consumers, however, that is likely to flow from such a regulatory error is greater and more difficult to rectify if the equity ß is too low rather than if it is too high. This is developed in more detail in the Report from NERA cited above (Document 67, Part 3.9) and the Gray/Officer Report (Document 68, Part 4.9) which relevantly cite the Productivity Commission's comments in this regard.

25.2 NERA also notes that the minimum compensation for risk will not ensure that sufficient investment occurs; as there must be a positive incentive to invest (rather than indifference by investors) it must exceed the minimum amount.

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should not depart from an interpretation placed by another court at a similar level in a parallel

25.3 This asymmetric risk of regulatory error should cause the Commission to err on the side of ensuring that the equity ß is not too low rather than ensuring that it is not too high. The Commission would be ignoring such an asymmetric risk without any expressed justification, if it adopted an equity ß of less than 1.

25.4 In this regard, in its submissions on the draft determination (Document 77), ETSA Utilities submitted that the Commission should "consider and set out explicitly its consideration of:

(a) the risk of regulatory error and the likely consequences of such error; and

(b) how its conclusions are in the long term interests of South Australian consumers".

Such explicit consideration cannot be found in the Determination. It should be done on the review so as to conclude that the appropriate equity ß is not less than 1.

26 Conclusion on Equity ß

26.1 For all of the reasons and evidence set out or referred to above, the Commission's decision in relation to equity ß is incorrect and unreasonable and is required to be revised having regard to the matters set out in the applicable law, by proper analysis of the reliable and relevant data presently available and by appropriate consideration of regulatory precedent and international benchmarks.

26.2 In order to comply with the requirements of the EPO, the NEC, the Electricity Act and other relevant requirements in the circumstances, the equity ß to be used in the calculation of the WACC should be one that gives due weight to the equity ß adopted

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hierarchy unless convinced that the interpretation is plainly wrong.

for the purposes of the prices set under the EPO and should, in any case, be not less than 1.

C MATTERS RAISED IN ETSA UTILITIES' LETTER OF 13 APRIL 2005

26.3 In relation to the form and contents of Part B of the Determination, in addition to any consequential amendments to Part B required as a result of varying decisions in relation to easements and equity ß, ETSA Utilities has identified drafting and other errors in its letter of 13 April 2005 (Document 83).

26.4 For the reasons given in that letter, those errors should be corrected in the manner set out in that letter.

D FURTHER COMMENTARY ON EVIDENCE

26.5 ETSA Utilities asks the Commission to vary the Determination in the manner set out in Part I of this review. If, however, the Commission confirms its Determination on review contrary to ETSA Utilities' submission, and ETSA Utilities seeks to appeal to the District Court under s.32 of the ESC Act, it is significant that s.32(6) provides:

> "*On appeal, the Court is only to consider the information on which the Commission based the price determination ... and any information put before the Commission on the review.*"

26.6 It follows from this provision that if the Commission refuses to vary or substitute its Determination on this review, on appeal the Court may only have regard to:

26.6.1 the information on which the Commission based the Determination – in this regard we note the Commission's assertions (Documents 81 and 84) that it has disclosed all such material in the Determination itself;

26.6.2 information "put before the Commission on the review" – (the language of this part of s.32(6), read with section 31, and the requirements of natural justice, makes it clear the Commission, if it is to confirm its Determination, cannot rely on new reports or other evidence not put before it on the review; and parties other than an applicant for review are limited to making submissions: s.31(3)(b)).

26.7 In a number of places in the Determination, the Commission has not accepted ETSA Utilities' assertions as a matter of fact (for example, ETSA Utilities' assertions that the valuation of easements was incomplete, and that there are a number of statistical methods for dealing with otherwise unsatisfactory historical proxy equity beta). It has therefore now produced evidence to support its view. The Commission has failed to obtain reports from independent experts or sworn evidence from any person when making the Determination. It cannot do so now. It follows that the Commission is faced, on each topic the subject of review, with essentially uncontradicted evidence which it should accept.