Submission of the Treasurer of South Australia

Review of the Essential Services Commission of SA

Electricity Distribution Price Determination

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1. Submission Summary

1.1 Easements

The Government rejects the Review Application claims of ETSA Utilities that an easement valuation of $224,450,000 should be included in the asset base as at 1 July 1999.

It is clear from the information set out in this submission that the valuation of easements included by the Essential Services Commission of South Australia (ESCOSA) in the Final Determination is in accordance with all legislative requirements and is consistent with regulatory precedent from other jurisdictional regulators and decisions of the Australian Competition and Consumer Commission (ACCC).

In particular, it is noted that there is no documentary evidence to support the claims of ETSA Utilities' employees that any assurance was given to bidders that a potential "up-side" existed with respect to an upward revaluation of easement at the next price reset.

It is recommended that ESCOSA confirm its Final Determination with respect to the valuation of easements following consideration of the ETSA Utilities Application for Review and this submission.

1.2 Equity Beta

The Government supports the adoption of an equity beta of not more than 0.8 and rejects ETSA Utilities' claim that the appropriate equity beta should be not less than 1.0.

The independent expert's report[1] provided with this submission, written by Associate Professor Dr Martin Lally, provides compelling evidence that supports an equity beta of 0.75.

In addition, the analysis of Dr Lally shows that even ETSA Utilities' own consultant's data, appropriately adjusted to remove the Blume transformation process, produces an equity beta of less than 0.82.

Importantly, when considering the overall level of the Weighted Average Cost of Capital (WACC), ESCOSA has been biased towards the business in regard to other input parameters, such as the Market Risk Premium.

Accordingly, the equity beta estimate adopted by ESCOSA of 0.8 is appropriate and should be maintained following consideration of the Review Application.

[1] Document 1

2. Regulatory determination on-balance

2.1 Overarching statutory guidance for ESCOSA

Section 6(1)(a) of the *Essential Services Commission Act 2002* (the ESC Act) requires that in performing its functions, ESCOSA must: "have as its primary objective protection of the long term interests of South Australian consumers with respect to price, quality and reliability of essential services".

This requirement must be borne in mind when considering all aspects of the Review Application.

2.2 Holistic nature of Final Determination

It is important to note that ESCOSA has made a Final Determination with respect to the electricity distribution network pricing for ETSA Utilities as a holistic and integrated determination.

In effect, the Final Determination is made "on-balance" after considering a range of input components. Probably, the best example of this is the Weighted Average Cost of Capital (WACC), where a range of components come together to determine an appropriate single rate of return.

ETSA Utilities has sought a review of only the equity beta component of the WACC, whilst leaving other components unchallenged. I note, however, that decisions on the components of the Final Determination are not taken in isolation, but rather taken together to form a collective view on a reasonable price, that is consistent with ESCOSA's statutory guidance, in particular, protecting the long-term interests of consumers.

The Government notes that the inclusion of a "Q" factor correction, which effectively ameliorates the volume risk faced by ETSA Utilities, must systematically lead to a lower equity beta.

The approach of ETSA Utilities in what is effectively "cherry picking" perceived unfavourable components, is likely to be contrary to the long-term interests of consumers which, in the Government's view, were met by the Final Determination.

It is the Government's view that regulatory decisions are made "on-balance." It is considered opportunistic to attempt to cherry-pick components of an overall WACC, which sits towards the upper end of the range of the most recent regulatory decisions for Australian utilities (apart from the QCA Final Determination which is expressed in post-tax nominal terms and is discussed elsewhere), as shown in the table below.

Decision	*Pre-tax real WACC %*
ESCOSA Final Determination – 2005 (distribution)	6.85
ACCC – Murraylink – 2003 (transmission)	6.7
IPART – Electricity – 2004 (distribution)	6.1 – 7.5
ICRC (ACT) – Water – 2004	7.0
GPOC (Tas) – Water – 2004	7.0
IPART – Sydney Water - 2003	5.2 – 6.7
ACCC - ElectraNet SA – 2003 (transmission)	7.17

2.3 Weighted Average Cost of Capital set in 1999

As the Government has previously noted, the initial WACC was set by the former Government at a time when they were seeking to maximise the privatisation proceeds from the sale of ETSA Utilities.

In 1999, ETSA Utilities' own consultants for this Review process, NERA, provided a report to the ACCC on the South Australian Electricity Pricing Order (EPO). With regard to the setting of the WACC, NERA assessed that:

> *"...in several respects the approach underlying the WACC used in the EPO differs from recent regulatory practice in Australia. In each of these respects the differences have inflated the WACC relative to that which would apply if the emerging regulatory practice had been adopted. We estimate that this could amount to a reduction in the WACC of around one percentage point."*[2]

In light of this evidence, it is clear that ESCOSA has good reason to depart from the parameters adopted by the former Government in establishing the EPO. The Review Application from ETSA Utilities (at paragraph 23.3) asserts that no cogent reason exists for such a departure. This appears to be contrary to the analysis of their own consultants at the time.

Not only is this view rejected, but it is argued that in order for ESCOSA to follow its statutory guidance with regard to the long term interests of consumers, it is incumbent upon ESCOSA to calculate a WACC that is not inflated, as was palpably the case when the original EPO was set in 1999.

[2] Document 2, Page 24

3. Easements

3.1 Introduction

ETSA Utilities has claimed that a substantial upward revaluation of easements should be included in the Final Determination by ESCOSA.

They have based this claim on a number factors including:

- the "Total Rent" consideration paid by the successful bidder for the ETSA Utilities business;
- an incorrect assertion that it was Government policy that easements should be valued using a deprival methodology at the next price reset; and
- an incorrect assertion that it is a legislative requirement that ESCOSA value easements using a deprival methodology.

The ETSA Utilities' claims fail to take into account regulatory precedent, in that indexed historic cost is now used by the vast majority of Australian regulators, or that easements are of a considerably different nature to other distribution assets.

Further, ETSA Utilities refers to 1994 documentation, which clearly were high level guidelines, written at a time before industry restructuring and independent regulation were put in place and before the issue of the appropriate methodology for easements had been settled.

ESCOSA has adopted a method that is consistent with its statutory guidance, consistent with regulatory precedent and is consistent with what a reasonable bidder for the ETSA Utilities business could reasonably have expected.

3.2 Bid structure of Hong Kong Electric and Cheung Kong Infrastructure

[CONFIDENTIAL SECTION]

3.3 Statements concerning Government Policy

[CONFIDENTIAL SECTION]

3.4 Documents held by the Department of Treasury and Finance

[CONFIDENTIAL SECTION]

3.5 Council of Australian Governments' Communiqué – 19 August 1994

The Review Application (at paragraph 5.3) states that the Commission is directed by the National Electricity Code (Code) with regard to the valuation of easements and should have regard to the 1994 publications: 'Attachment A' to the Council of Australian Governments' (CoAG) Communiqué of 19 August[3] and 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[4].

The CoAG communiqué is a very high level document that expresses a view that the fixed cost component of network pricing should be determined according to a common method throughout the National Electricity Market (NEM).

However, the Application for Review draws to the attention of ESCOSA paragraph 3(b) which states, "for the purposes of developing network pricing and access charges, the methodology for asset valuation should be consistent with the National Performance Monitoring Sub-committee report and with Australian Accounting Standards."

In turn, the National Performance Monitoring Sub-committee's report (at paragraph 178) states "that land should be measured consistently with the measurement policies applied to other physical non-current assets of GTE's – that is, at deprival value."

Paragraph 179 of the same document then goes on to explain under what circumstances land should be valued using a deprival methodology:

> *"Where land is held for continued use and would be replaced if the GTE was deprived of it, the value of that land under the deprival value framework would be the current market buying price of that land in its current use. As land is potentially the most universal of physical non-current assets and since its purpose may be readily changed from one function to another (given time and resources) these Guidelines require that the higher value of current market buying price and the current market value (selling price) based on its feasible alternative use, taking account of the costs of achieving that potential."*

It is clearly evident from the description of land used in paragraph 179, that easements were not being considered. This is very clearly highlighted by the phrase "its purpose may be readily changed from one function to another…" Obviously, this is not a characteristic shared by easements. As noted in section 3.6, the NSW IPART considered that as easements have a restricted nature, they may have no value to any other entity. Further, the ACCC has noted that there is no market for easements.

The distinction between easements and other network assets has been made by the vast majority of regulators throughout Australia, as noted in section 3.6. For example, the QCA referred to easements as "unusual," while the ACCC described their "special characteristic." As such, it is clear that a distinction has to be made between the assets

[3] Document 5
[4] Document 6

being considered in the 1994 publications and the correct and appropriate valuation methodology for easements.

This distinction has correctly been made by ESCOSA and there has been no evidence put forward on the basis of the CoAG communiqué or the National Performance Monitoring Sub-committee's report to suggest that a departure from this methodology is warranted or required.

Accordingly, it is clear that the National Performance Monitoring Sub-committee's report provides no guidance whatsoever to Australian regulators on the method to be used when valuing easements.

However, the CoAG Communiqué may provide some guidance where it refers to consistency in valuation method across the NEM. To this end, reference to other regulatory decisions within the NEM is instructive.

3.6 Regulatory Precedent

It is clear that a consensus has emerged from the vast majority of regulatory decisions, that easements are of a somewhat unusual nature and different to other network assets. Easements are not likely to be replaced and are not consumed over time and, while their value has the potential to be quite high, as they can not be traded, it would be difficult to realise their value.

The Government highlights the December 2004 publication of the ACCC with regard to the Statement of Regulatory Principles for the Regulation of Electricity Transmission Revenues. Appendix C of the Background Paper contains a detailed discussion on the nature of easements and the appropriate method for their valuation. The excerpt contained below highlights the consensus that has been reached with regard to the vexed question of easement valuation:

> *"The ACCC considers that a historic cost approach is the most appropriate asset valuation methodology for easements. This is because a historic cost approach uses the TNSPs' actual expenditure incurred when acquiring easements. The ACCC notes that most TNSPs have records of the costs incurred in the process of acquiring easements and these can be used to establish historic cost valuations. Such a process was used in establishing several jurisdictional valuations."*[5]

Similarly, in December 1999, the NSW IPART, made a Determination on the Regulation of NSW Electricity Distribution Networks, in which they stated that:

> *"To include a market value for existing easements in the initial asset base would be of no economic benefit. If new easements need to be acquired, the expenditure will be considered on the same basis as the other elements of capital expenditure.*
>
> *The Tribunal recognises that easements are required by the DNSP to provide prescribed distribution services. Electricity easements generally apply in perpetuity. Gradual growth in load, and the difficulty and expense of negotiating a new easement*

[5] Document 7, Page 135

> *means that they are rarely replaced. Indeed, a network is far more likely to seek to alter the terms of an existing easement to allow a different sized wire to be erected than to extinguish an easement and negotiate a new one. The restrictive nature of easements (ie being an easement for electricity distribution lines only) may mean that they have no value to any other entity."*[6]

Prior to the release of the ACCC's Statement of Regulatory Principles for the Regulation of Electricity Transmission Revenues in December 2004, the ACCC released the South Australian Transmission Revenue Cap 2003 – 2007/2008 Decision, applying to ElectraNet SA.

Similarly to ETSA Utilities, ElectraNet SA argued strongly for a large upward revaluation of its easement rights from $3.1 million to $215 million, again based on a deprival methodology revaluation undertaken by Maloney Field Services.

In this Decision the ACCC noted that the Code "stipulates that assets should not be valued above their deprival value."[7] Accordingly, the ACCC concluded that the Code sets an upper limit to asset valuation, but does not stipulate that assets must be valued in such a manner. This issue is discussed in detail in section 3.8

The ACCC goes on to say that it considers that:

> *"it would be inappropriate to value easements at this maximum limit, i.e. deprival value. This view is based on theoretical considerations such as the appropriateness of the* [valuation] *method given the special characteristic of easements and practical considerations such as the reasonableness of returns to TNSPs."*

In March 2004, the Queensland Competition Authority (QCA) released a detailed review of easement valuation and concluded that:

> *"In summary, therefore, it is not possible to reasonably determine a market value for easements. Furthermore, so far as determining a DORC* [deprival methodology] *is concerned, easements generally do not depreciate in value, there is no meaningful capacity for optimisation and it is difficult to determine a replacement cost other than by reference to the historic circumstances of the particular easement."*[8]

The QCA's recent Final Determination on the Regulation of Electricity Distribution therefore concurred that the unusual characteristics of easements meant that it was appropriate for easements to be valued at indexed historic cost.

Such an approach is consistent with the vast majority of regulatory decisions across the NEM.

To suggest, as ETSA Utilities does, that a deprival methodology valuation of easements does not constitute a windfall gain, is plainly absurd.

It is for this reason, and the fact that there is no theoretical basis for valuing an asset with the characteristics of an easement at deprival value, that regulators across

[6] Document 8, Page 52
[7] Document 9, Page 44
[8] Document 10, Page 11

Australia have rejected the deprival methodology valuation for easements for electricity networks. In preference, many regulators have accepted the historic valuation and rolled that value forward to the start of the next regulatory period utilising the CPI.

ESCOSA have adopted this approach, as is appropriate.

3.7 ESCOSA discretion to determine a value for easements under the Code

It is accepted by both ESCOSA and ETSA Utilities that clause 7.2(e)(iv) of the EPO requires that ESCOSA give consideration to easements in the 2005 price re-set. ESCOSA has taken into account the value of easements as part of its making of the price determination. ESCOSA has satisfied the requirement of clause 7.2(e)(iv) of the EPO.

With regard to the value for easements determined by ESCOSA, both ESCOSA and ETSA Utilities accept that clause 6.10.3(e)(5)(ii) of the Code grants ESCOSA the discretion to either determine a value for the easements (the first limb) or use a value for easements consistent with the regulatory asset base established in South Australia (the second limb).

Clause 6.10.3(e)(5)(ii) of the Code provides:

> *"subject to clause 6.10.3(e)(5)(i), assets (also know as "sunk 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;"*

ETSA Utilities contends, however, that ESCOSA is required to use a deprival method when exercising its discretion under clause 6.10.3(e)(5)(ii) of the Code.

However, the Government submits that ETSA Utilities is incorrect and that ESCOSA is not required by the Code to adopt a deprival method for the valuation of easements.

The two alternatives provided for in clause 6.10.3(e)(5)(ii) of the Code are respectively referred to by ETSA Utilities in its application as the first and second limb. For consistency, this submission will adopt the same approach in responding to the arguments raised by ETSA Utilities.

3.8 The first limb

ETSA Utilities submits that clause 6.10.3(e)(5)(ii) of the Code should be read in conjunction with clause 6.10.3(e)(5)(iii) of the Code.

ETSA Utilities, under part 5 of its Application for Review, contends that if ESCOSA determines a value for easements in accordance with clause 6.10.3(e)(5)(ii) a deprival method must be adopted to remain consistent with Clause 6.10.3(e)(5)(iii) of the Code.

Clause 6.10.3(e)(5)(iii) of the Code provides:

> *"subject to clause 6.10.3(e)(5)(i), valuation of assets brought into service after 1 July 1999 ("new assets"), any subsequent revaluation of any new assets and subsequent* ***revaluation*** *of assets existing and generally in service on 1 July 1999* ***is to be undertaken on a basis to be determined by the Jurisdictional Regulator****. In determining the basis of asset valuation to be used, the Jurisdictional Regulator must have regard to:*
>
> A. *the agreement of the Council of Australian Governments of 19 August 1994, that deprival value should be the preferred approach to valuing network assets;*
>
> B. *any subsequent relevant decision of the Council of Australian Governments; and*
>
> C. *Such other matters reasonably required to ensure consistency with the objectives specified in clause 6.10.2."* (Emphasis added.)

Clause 6.10.3(e)(5)(iii) directs that any subsequent revaluation of the assets existing and generally in service on 1 July 1999 is to be undertaken on a basis to be determined by the Jurisdictional Regulator.

Clause 6.10.3(e)(5)(iii) of the Code does not require ESCOSA to determine the method for revaluation as part of making its price determination or to undertake a revaluation of the assets in accordance with the method once so determined.

ESCOSA's discretion to determine a value for existing assets under the first limb of clause 6.10.3(e)(5)(ii) of the Code is not fettered by the application of clause 6.10.3(e)(5)(iii) of the Code. As noted in section 3.6, the ACCC did not value ElectraNet SA's easements using a deprival methodology.

The provisions of the Code applicable to the ACCC in making this decision are similar to those that apply to ESCOSA. By analogy, the ACCC decision confirms that ESCOSA is not required under the similar provisions of the Code to determine a deprival value for easements for the purposes of 2005 price re-set.

While ESCOSA ***may*** decide to set the method for the revaluation of existing assets including easements under clause 6.10.3(e)(5)(iii) of the Code, it is not required to do so.

ESCOSA in making its decision must have regard to specified matters including the agreement of **CoAG** of 19 August 1994, that deprival value should be the preferred approach to valuing network assets. The clause does not however stipulate that a deprival value method must be adopted.

Accordingly, if after having regard to these matters, ESCOSA decided not to adopt a deprival approach, the decision would remain within the authority granted to ESCOSA under clause 6.10.3(e)(5)(iii) of the Code.

ETSA Utilities' interpretation of clause 6.10.3(e)(5)(ii) and clause 6.10.(e)(5)(iii) of the Code is based on a misunderstanding of the legal obligations placed upon ESCOSA under the Code. In particular, ETSA Utilities' position does not make the distinction between matters that ESCOSA may decide and mandated outcomes.

The value used for easements is a matter that may be determined by ESCOSA under the first limb of clause 6.10.3(e)(5)(ii) of the Code. Clause 6.10.3(3)(5)(iii) of the Code does not apply to require ESCOSA to adopt a deprival value for this decision unless ESCOSA:

- first decides to determine a method for the revaluation of assets;
- determines that a method for revaluation is to be on a deprival basis; and
- undertakes a revaluation of easements in accordance with the deprival method so determined.

ESCOSA is not required to adopt under either clause 6.10.3(e)(5)(ii) or clause 6.10.3(e)(5)(iii) of the Code a deprival method for the valuation of easements for the purposes of the 2005 Electricity Distribution Price Review.

ETSA Utilities is therefore incorrect in its contention that clause 6.10.3(e)(5)(iii) of the Code establishes a requirement that ESCOSA, when exercising its discretion under the first limb of clause 6.10.3(e)(5)(ii) of the Code, must adopt a deprival method to determine the value for easements.

ESCOSA's decision expressed in paragraph 9.5.4 of Part A of the Price Determination is consistent with ESCOSA determining a value for easements under the first limb of clause 6.10.3(e)(5)(ii) of the Code. ESCOSA is therefore requested to confirm its decision as expressed in paragraph 9.5.4 of Part A of the Price Determination.

Please note that correctly framed, ETSA Utilities is arguing that ESCOSA, as an outcome of its review, should:

- exercise its discretion under clause 6.10.3(e)(5)(iii) of the Code to determine a deprival method for the revaluation of easements;
- conducting a revaluation of easements in accordance with the deprival method so determined to derive a value of $224.45 million;
- exercise its discretion under clause 6.10.3(e)(5)(ii) of the Code to determine for the purposes of the 2005 price re-set the value of $224.45 million for easements; and
- exercise its discretion under section 31(8) of the ESC Act to vary or substitute its price determination accordingly.

While ETSA Utilities is seeking to justify its contention that a deprival method of evaluation should be adopted for the revaluation of easements by submitting this outcome is mandated by the Code, the Government considers that this conclusion is not so mandated and must be justified having regard to the merits of adopting this approach.

As noted above, a deprival methodology is inappropriate for valuing easements. Accordingly, the Government supports the merits of ESCOSA's original decision not to determine a deprival value for easements.

3.9 The second limb

The alternative that ESCOSA may adopt pursuant to clause 6.10.3(e)(5)(ii) of the Code is to determine a value for assets in existence and generally in service on 1 July 1999 that is consistent with the regulatory asset base established in the participating jurisdiction.

Under heading 9.5.3.2 of Part A of the Price Determination, ESCOSA correctly states that easements and substation land have been valued for the purposes of establishing ETSA Utilities' initial regulatory asset base. The value of approximately $6 million for easements as set out in Table 9.2 in Part A of the Price Determination is correct.

ESCOSA is therefore authorised under clause 6.10.3(e)(5)(ii) of the Code to value easements at $6 million as this value is *prima facie* consistent with the regulatory asset base established in South Australia.

ETSA Utilities, under part 6 of its Application for Review, however, suggests that clause 6.10.(e)(5)(ii) of the Code establishes a requirement that ESCOSA may not rely on the valuation stated in the regulatory asset base for easements.

Based on the reference to the words "*consistent with*" in clause 6.10.3(e)(5)(ii) of the Code, ETSA Utilities proposes that ESCOSA must look behind the stated value and make a determination as to the basis upon which the assets were valued. Further, once ESCOSA has determined this basis, it is required to value the easements accordingly. Specifically, on a deprival basis giving a value for easements of $224.24 million.

The value of $6 million for easements is clearly provided for in the regulatory asset base. A valuation by ESCOSA of easements under the second limb of clause 6.10.3(e)(5)(ii) of the Code, on a deprival basis as requested by ETSA Utilities, namely at $224.24 million, would be manifestly inconsistent with the value for easements of $6 million as provided for in the regulatory asset base.

The Government considers that ESCOSA is not authorised by the second limb of clause 6.10.3(e)(5)(ii) of the Code to undertake the process as proposed by ETSA Utilities. If ESCOSA exercises its discretion under the second limb of the clause 6.10.3(e)(5)(ii) of the Code to value easements "consistent *with the regulatory asset base established in the participating jurisdiction*" it must use a value of $6 million.

Accordingly, if ESCOSA has relied on the second limb of clause 6.10.3(e)(5)(ii) of the Code, ESCOSA must confirm on review its decision expressed under heading 9.5.4 of Part A of the Price Determination.

The effect of the submission by ETSA Utilities is that ESCOSA should not exercise its discretion under the second limb of clause 6.10.3(e)(5)(ii) to determine a value consistent with the regulatory asset base.

For the reasons set out Part A of ESCOSA's Price Determination and in this section 3, the Government supports the merits of adopting a value for easements consistent with the regulatory asset base.

3.10 Recognition of pre-existing policies of governments

Clause 6.10.2(g) of the Code requires that the distribution services pricing regulatory regime to be administered under Part D of the Code must seek to achieve the outcome of reasonably recognising pre-existing policies of governments regarding distribution asset values, revenue paths and prices.

Clause 6.10.3(e)(6) of the Code provides that the regulatory regime administered by ESCOSA must have regard to the need to provide reasonable certainty and consistency over time of the outcomes of regulatory processes, including under subclause (iv)(A):

> *"the initial revenue setting and asset valuation decision made by a government at a time at which that government was a Distribution Network Owner in the context of industry reform pursuant to the Competition Principles Agreement."*

It is noted that under heading 9.5.3.2 of Part A of the Price Determination, ESCOSA has on the basis of clause 6.10.2(g) and clause 6.10.3(e)(6)(iv)(A) of the Code, determined that it may ascribe a value to easements in existence and in service as at 1 July 1999 in a manner consistent with the regulatory base established in South Australia.

ETSA Utilities, under part 9 of its Application for Review, submits that ESCOSA has misapplied clause 6.10.2.(g) and clause 6.10.3(e)(6)(iv)(A) of the Code in making its determination that it may ascribe a value for easements consistent with the regulatory base established in South Australia.

In particular, ETSA Utilities submits that:

- with respect to clause 6.10.2.(g) of the Code, the Government's policy was not that easements should continue to be valued at the initial allowance and that adopting a value consistent with the regulatory asset base is to ignore the Government's policy position; and
- with respect to clause 6.10.3(e)(6)(iv)(A) of the Code, the Government's decisions in relation to valuation of assets included that all assets should be valued on a deprival basis and that on the 2005 price re-set easements should be revisited; and
- accordingly, if ESCOSA persists in using a value consistent with the regulatory asset base it will not be giving effect to either clause of the Code.

As noted in section 3.3, the Government considers that there is no pre-existing Government policy or Government decision to the effect that easements are to be the subject of a revaluation on a deprival basis as part of the 2005 Electricity Distribution

Price Review. ETSA Utilities contention that ESCOSA has misapplied clause 6.10.2(g) and clause 6.10.3(e)(6)(iv)(A) of the Code is therefore incorrect.

The Government considers that ESCOSA's decision to ascribe a value to easements in existence and in service as at 1 July 1999 in a manner consistent with the regulatory asset base established in South Australia is consistent with clause 6.10.2.(g) and clause 6.10.3(e)(6)(iv)(A) of the Code.

3.11 ESCOSA acting inconsistently with the Regulatory Regime

In part 10 of ETSA Utilities' Application for Review, ETSA Utilities states that it is fundamental to the regulatory regime established under the Code, the EPO and the *Electricity Act 1996* that ETSA Utilities should be given a fair and reasonable return on the efficient cost of providing the assets employed in the distribution network services business.

ETSA Utilities further contends that the assets valued must include, among other things, all of ETSA Utilities' easements in use as at 1 July 1999, and the valuation must be on a basis that establishes the efficient cost of providing the assets in question, consistent with the requirements of the Code and the EPO.

On this basis, ETSA Utilities contends that the valuation of all of ETSA Utilities' easements on a deprival basis is consistent with the purpose and the nature of the regulatory regime applicable in the present case.

For the reasons expressed throughout section 3 of this submission, the Government considers that a valuation of easements on a deprival basis does not reflect the efficient cost of providing this asset.

The Government further submits that the decision of ESCOSA not to adopt a deprival value for easements is consistent with the requirements of the regulatory regime established by the EPO and the Code and accordingly requests that ESCOSA confirm its original decision.

3.12 Conclusion on Valuation of Easements

Regulators across Australia have commented on the different characteristics of easements and have concluded that, due to these different characteristics, valuation using a deprival methodology is inappropriate.

Most regulators have chosen to adopt an indexed historical cost approach, which is consistent with the approach taken by ESCOSA.

ETSA Utilities has relied on the sworn statements of employees' recollection of events from the time of privatisation to try to assert Government policy at that time with respect to the future revaluation of easements.

The EPO does not provide any certainty for bidders that a revaluation based on a deprival methodology would be carried out, as would have been expected if it were Government policy that such a revaluation should take place.

[**CONFIDENTIAL PARAGRAPH]**

It must be concluded that the Final Determination with respect to the value of easements is consistent with the legislative requirements and therefore Government policy, as they have existed since privatisation.

Accordingly, it is suggested that the value included in the Final Determination with respect to easements be maintained.

4. Equity beta

4.1 Introduction

The Government considers that the equity beta of 0.8 adopted by ESCOSA in the Final Determination is within the expected range, given current market estimates of betas and after appropriate consideration of the effect of the Final Determination in mitigating almost all of the systematic risk faced by ETSA Utilities.

To assist ESCOSA in considering the Review Application from ETSA Utilities, this submission includes an independent expert's review of the appropriate equity beta, authored by Associate Professor Dr Martin Lally.

Dr Lally has used a detailed analysis to calculate an appropriate asset beta for ETSA Utilities, before using the agreed gearing formula to calculate an equity beta of 0.75. It is noted that Dr Lally's approach provides a more reliable result as it draws upon a larger data set than that relied upon by Professors Gray and Officer, which compares a total of four Australian firms.

In addition, Dr Lally has reviewed the analysis of Professors Gray and Officer and has concluded that, after the removal of the flawed Blume adjustment (that has been uniformly rejected in other Australian regulatory decisions), their own data points to an equity beta of 0.82.

The following sections (4.2 – 4.5) deal with the detailed analysis of the appropriate equity beta for ETSA Utilities and draws heavily upon the independent expert's report provided by Dr Lally.

4.2 Analysis of appropriate equity beta

A key issue to be considered when attempting to estimate equity betas is the quality of the data set being manipulated.

As noted by ESCOSA, the number of Australian firms upon which an estimate of an equity beta can be based is six. Dr Lally notes that this is far too small a set to place any great reliance upon. Professors Gray and Officer attempt to rely on this set, but in order to achieve statistically significant results, must use inappropriate data manipulation processes, such as the Blume transformation, as discussed at section 4.4.

Accordingly, Dr Lally's analysis widens the data set to include US electricity and gas distributors, which are subject to a regulatory regime that gives rise to a similar systematic risk faced by ETSA Utilities. Further, Dr Lally's analysis considers beta estimates drawn from a number of sources and over a number of time periods, to minimise estimation error. The results of this analysis are tabulated on page 13 of Dr Lally's report.

The median asset beta for the firms and time periods considered is 0.26. However, Dr Lally has noted that some of the results from 1998-2001 are unusually low, possibly due to the technology bubble. If an appropriate adjustment is made to account for this, the result is a median asset beta of 0.30.

After applying the transformation for different tax regimes and the assumed gearing ratio for ETSA Utilities, the resultant equity beta estimate for ETSA Utilties is 0.75.

It is noted that Dr Lally's approach differs somewhat from the approach of ESCOSA, however, the results from the two processes yield very similar results.

4.3 Analysis of Professors Gray and Officer

The ETSA Utilities Review Application draws heavily upon material presented by Professors Gray and Officer which points to an equity beta of not less than one.

However, as noted in section 4.4, the data used by Professors Gray and Officer has been subjected to the Blume transformation which has been widely considered by regulators to be inappropriate. Further, perceived "outliers" have been removed from the data set to "eliminate a small number of observations that are so extreme and influential as to bias the beta estimate."

However, as shown by Dr Lally, assuming a normal distribution, the percentage of observations removed would be 32%, 13% and 5% following removal of outliers outside of 1, 1.5 and 2 standard deviations respectively. The removal of 32% or 13% of observations is hard to reconcile with the objective of removing a "small number" of outliers.

Professors Gray and Officer also remove all data from the "technology bubble" period of July 1998 to June 2001. Whilst Dr Lally proves that this produces an upward bias in the estimate of the equity beta, the resulting size of the bias is unknown.

To assist ESCOSA in considering the Review Application, Dr Lally has reconstructed the beta estimate undertaken by Professors Gray and Officer, by:

- removing observations outside of 2 standard deviations (or 5% of the observations), consistent with removal of a small number of outliers as described in the Gray/Officer report; and
- removing the Blume transformation bias.

Following these corrections, the estimated equity beta, using the data presented by Professors Gray and Officer, is 0.82. It should be noted that no adjustment has been made for the removal of the "technology bubble." Accordingly, the estimate of 0.82 is likely to be upwardly biased according to Dr Lally.

4.4 The Blume Transformation

The analysis of Dr Lally identifies three clear problems with the Blume transformation process, as used in the analysis performed by Professors Gray and Officer.

Firstly, the Blume transformation essentially captures the relevant data set and forces any outlying betas towards 1.0. Dr Lally notes that whilst this could represent the movements of true US betas from 1926 to 1968, the movement towards 1.0 would have no necessary relevance to ETSA Utilities or Australian firms in general at the present time.

Secondly, even if one were to assume that the shift towards 1.0 observed by Blume were representative of the shift in Australian firms' betas at present, this is not representative of a single entity like ETSA Utilities, whose beta cannot be altered via diversification.

Thirdly, even if the conclusion of Professors Gray and Officer that the Blume process is a manifestation of estimation error only was accepted, the Blume process forces beta estimates towards 1.0, rather than towards the industry average. For example, if the estimated beta for a firm was 0.5 and the industry average from which this firm was drawn was also 0.5, the Blume transformation would still seek to move the estimated beta for the average firm towards 1.0.

Clearly, the Blume transformation process is biased towards one and is inappropriate for use in this context.

This position is supported by the Victorian Essential Services Commission (ESC) in their Draft Decision with regard to the Review of the Gas Access Arrangements. In their Draft Decision, they state (note that this decision was maintained in their Final Determination):

> *"With respect to the first of these reasons for the Blume adjustment, it is noted that taking an average (or weighted average) of a group of firms that are considered to be sufficiently comparable – as the Commission has undertaken in this Draft Decision – is an alternative means of reducing the statistical uncertainty associated with individual beta estimates. The Commission considers that, given its careful selection of comparable entities and the use of an average from the group, the application of the Blume adjustment is unnecessary, and indeed, may introduce bias in the resulting estimates."*[9]

This view accords with the position put forward by Dr Lally. Accordingly, the Victorian ESC had regard only for raw beta estimates in making their Final Determination.

As noted above, after the removal of the biasing effect of the Blume transformation process on the Officer/Gray estimate, the resultant equity beta is 0.82, providing further evidence that the estimate adopted by ESCOSA is accurate and appropriate.

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[9] Document 11, Page 234

4.5 Removal of Systematic Risk

One of the key points of ESCOSA's Final Determination was the adoption of a "Q" factor adjustment. Essentially, if actual energy sales are different from forecast sales, 85% of the revenue variation is removed (i.e. only 15% of the forecast error is retained or recovered by ETSA Utilities).

As noted by Dr Lally, the regulatory regime, in particular the "Q" factor, has the effect of essentially eliminating ETSA Utilities' systematic risk, manifested in the form of both volume and cost shocks.

However, ETSA Utilities has claimed that this mitigation of systematic risk has little influence on the appropriate estimation of beta.

In response to this claim, it is instructive to note the comments of the QCA on the same claims made by Queensland distributors:

> *"The Authority disagrees with the DNSPs' claim that the impact of a revenue cap on systematic risk is ambiguous. The DNSPs argued that, while the revenue cap would be expected to reduce the co-movement in the returns of the relevant entity compared to a price capped firm, the volatility of total returns would be higher so the impact on systematic risk would be ambiguous.*
>
> *The Authority believes that a revenue cap (as opposed to a price cap) implies that there will be a reduction in the covariance between returns to the asset and returns to the market, which is the relevant matter for beta risk."*[10]

Accordingly, it is appropriate for ESCOSA to consider the level of systematic risk faced by ETSA Utilities when considering an appropriate beta. As the systematic risk faced has been significantly ameliorated, an equity beta of significantly less than 1.0 would be appropriate.

Clearly, there exists a strong interconnectivity between the equity beta and the systematic risk faced by ETSA Utilities. Accordingly, this provides further evidence that it is not appropriate to consider single components of the WACC in isolation from other input components.

Indeed, there is a substantial body of work that suggests that the MRP adopted by ESCOSA is an overestimate of the future MRP faced by ETSA Utilities.

For instance, declines in the real interest rate and the introduction of dividend imputation in 1987 have produced capital gains which could not have been anticipated. Together they have boosted excess returns by about 1 percentage point over the 30 years to 2003. Taking these biases into account, the MRP over the last 30 years would appear to lie in the range 4½ to 5 percent, rather than the 6 assumed by ESCOSA.

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[10] Document 12, Page 118

Further evidence to this effect was published by Professor Kevin Davis in his consideration of the WACC for the Gas Industry, where he showed that the MRP could be estimated to sit between 4.5 percent and 7 percent, "with figures at the lower end of that range probably more applicable."[11]

4.6 Regulatory Precedent

It is important to note that an equity beta of less than 1.0 has been adopted in regulatory decisions in other jurisdictions. In 1999 and 2004, the NSW IPART adopted ranges of 0.78 to 1.14[12] and 0.78 to 1.11[13] respectively.

In 2001, the QCA included an equity beta of 0.71.[14]

It is acknowledged that the ACCC adopted an equity beta of 1.0 in its Decision on the Statement of Principles for the Regulation of Electricity Transmission Revenues. However, the Government also notes the comments of the ACCC in the Discussion Paper that,

> *"the Commission has regularly indicated that an [equity beta] of one or above is most likely too high for the regulated TNSPs, the Commission has provided an [equity beta] biased towards the TNSPs and has not set an [equity beta] below one in any revenue cap decisions. Other regulators have set an [equity beta] of less than one for some electricity distribution networks."*[15]

The Government does not consider that it is appropriate for ESCOSA to provide an equity beta that is biased towards the regulated entity, as it would be if an equity beta of 1.0 or higher were to be adopted. Such an approach would be inconsistent with the primary directive of ESCOSA, as discussed in section 2.1, to protect the long term interests of consumers.

In addition, the Allen Consulting Group's Report on the Empirical Evidence on Proxy Beta Values for Regulated Gas Transmission Activities highlighted that:

> *"…this report has demonstrated that no implication can be drawn from current market evidence that the proxy betas that Australian regulators have adopted are likely to understate the 'true' beta – rather, as noted above, the current evidence suggests that regulators systematically have erred in the favour of the regulated entities."*[16]

Again, the statutory guidance to ESCOSA is clear. It does not have the discretion to err in favour of the regulated entities. It is incumbent on ESCOSA to develop an estimate of beta that is in the long term interests of consumers.

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[11] Document 13, Page 14
12 Document 8, Pg 45
13 Document 14, Pg. 61.
[14] Document 15, Pg 11
15 Document 16, Pg 76
[16] Document 17, Pg 43

A value of 0.8 for the equity beta is not outside the range of regulatory decisions on this issue. It is also consistent with many comments of other regulators that a value of 1.0 errs in the favour of the regulated business.

4.7 Conclusion on equity beta

Dr Martin Lally has presented a very detailed analysis of the appropriate estimate of an equity beta for ETSA Utilities. On the basis of Dr Lally's own analysis, the appropriate equity beta is 0.75.

However, it is also instructive to consider the re-adjustment results of amending the Officer/Gray data to remove the bias caused by the Blume transformation. This yields an equity beta of 0.82.

Thirdly, ESCOSA has conducted its own analysis based on data from the Allen Consulting Group, with a resulting equity beta estimate of 0.8.

Therefore, there is very strong evidence that the correct equity beta estimate for ETSA Utilities lies somewhere in the range from 0.75 to 0.82, with ESCOSA's estimate of 0.8 representing a reasonable mid-point.

Accordingly, it is recommended that ESCOSA maintain its view that the correct equity beta estimate for ETSA Utilities is 0.8.

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