VALUATION OF QUEENSLAND DISTRIBUTORS

Response to Discussion Paper

Ergon Energy Corporation Limited

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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY

Ergon Energy Corporation Limited (Ergon Energy) takes this opportunity to respond to the invitation extended by the Authority to provide a submission about the "Valuation of Queensland Distributors" Discussion Paper released on 6 November 2003.

There can be no doubt that the asset valuation is a major factor for the next Regulatory Determination, in that it is a key variable in determining about 70% of the revenue cap. Because of this Ergon Energy believes that it is vital that the valuation methodology is transparent.

Ergon Energy agrees with the choice of the depreciated optimised replacement cost (DORC) as the basis of valuation. However there are some areas in the paper where Ergon Energy believes the methodology is not transparent and these are highlighted in this submission as points of concern.

A major area of concern is the determination of modern asset equivalent (MEA) rates. Ergon Energy believes the description by Sinclair Knight Merz (SKM) of the manner in which the rates are to be derived provides no comfort.

Ergon Energy believes that the sources listed are variable in quality, and in some cases are just incorrect. It is understood that the 1999 valuation rates were derived from the various predecessor corporations' valuations, indicating that there may be a perpetuation of any errors. The extent to which the SKM price book and valuation database addresses these matters is not known, as the distributors have no knowledge of the manner in which the database rates were derived or updated.

Moreover, Ergon Energy needs to be sure increased compliance costs in the areas such as Workplace Health & Safety and Environment are reflected in the unit rates. Updating earlier rates for inflation or relying on dated quotes for work will miss this important increase in costs.

Other issues in the paper also hinge on the matter of transparency. While there is general agreement on many matters of principle, it is important that the *process* be understood and agreed.

Ergon Energy believes good co-operative progress has been made by the three parties (QCA, Valuer and Distributors). This process needs to continue with the QCA acting as arbiter in any disagreements.

2. INTRODUCTION

SKM's Discussion Paper invites comment on the high level decisions to be made in order to conduct the valuation of distributors' network assets. These decisions need to be made quickly so that Ergon Energy and SKM can proceed with resolving the many detailed issues that are still outstanding and not addressed by the paper.

This submission uses the same headings as the Discussion Paper for easy cross-referencing.

3. REFERENCE DATE FOR VALUATION

SKM proposes a date for data capture of 31 December 2003. Although Ergon Energy has considerable work to do to be ready for this, we are working towards this date and at this stage do not envisage any problems.

Nevertheless, the hand-over issues of Work In Progress (WIP) and the physical asset register (the asset count) need to be coordinated to prevent double-counting or omissions.

Due to the slippage on the final confirmation and definitions of building blocks, it has become more difficult to meet the date for the delivery of the data. Ergon Energy is currently developing the queries of the new systems to obtain this data. We look forward to working closely with SKM to quickly resolve any issues that may hold up the development of these queries.

The paper states that "there will be an opportunity in July 2004 to adjust the rolled forward valuation for actual capital expenditure for the final six months of the financial year 2003/2004". Final confirmation of this Capex could be as late as September.

It is unclear whether this Capex is able to be provided before the regulatory accounts are signed off by the auditor. Furthermore, as the Capex will not be broken into building blocks, it will not be in a form that can be easily added to the asset base. Although this may not be a major issue, it would be helpful to have a valuation that is fully accounted for by the list of building blocks.

4. DETERMINATION OF ASSET CATEGORIES AND SUB-CATEGORIES

Ergon Energy endorses the proposed differentiation in conductor sizes (light/medium/heavy) and feeder locations (rural/urban). For consistency, we suggest that the definition for urban should be what is defined as "urban" for reliability purposes. This will reduce the confusion of having two "urbans", and there should be a high correlation between this and the span length method as well.

Definitions on how to categorise feeders into wet and dry[1] areas also need to be agreed, but whatever the case, Ergon Energy supports the categorisation of entire feeders into either category.

Ergon Energy supports SKM's approach on establishment costs for substation bays or primary plant.

Ergon Energy would like to see separation of secondary systems as they have significantly different asset lives to primary plant.

[1] The first dot point says that asset values are likely to INCREASE as a result of the shortening lives for wet. Although it is true that the asset values are likely to increase, the phrasing is not quite right. We suggest – "Ergon Energy's valuation is likely to rise due to the fact that the 'dry' lives are longer than the lives used in the 1999 valuation". In other words, the 1999 lives are now equivalent to the WET lives for this valuation.

5. DETERMINATION OF MODERN EQUIVALENT ASSET (MEA) UNIT RATES

5.1. Sources of Rates

The Discussion Paper lists the locations from which unit rates will be sourced:

- 1999 Queensland electricity distribution valuation;
- 2002 NSW electricity distribution valuation;
- SKM price book and Valuation Database; and
- Market price survey of construction and maintenance activities.

Ergon Energy is unaware of how these sources were derived, and we cannot therefore be confident that distributors' input has been taken into account.

It is possible that errors exist in these sources, and relying on them to the exclusion of current construction methods, legislative requirements and current input prices for construction will perpetuate errors or inconsistencies from the past.

5.2. Potential Problems with Sourced Rates

Each of the above sources has potential problems:

- It is understood that the 1999 rates were largely rolled forward from 1996 valuation - but now, in 2003, the basis for the rates is not fully understood nor recalled - likewise for how rates were rolled forward. The 1996 valuation was one of the firsts of its kind, and both valuer and distributors not familiar with the process. Therefore, this 1996 valuation should not be relied upon too heavily.
- There are no details available on the 2002 NSW valuation for the distributors to assess them.
- We assume the data in the SKM price book and valuation database uses sources such as the 1999 Queensland and 2002 NSW valuations, so circularity is introduced. At some point, the real efficient costs incurred by distributors needs to be taken up, or else SKM's database will diverge from reality.
- The market price survey of construction and maintenance activities does not include the costs of network governance and ownership. Distributors need to maintain design and construction standards, plan for network expansion and augmentation, and control the network for maintenance, augmentation and additions.

5.3. New Considerations – Not In Sourced Rates

Furthermore, Ergon Energy needs to be sure that changes, such as new compliance with Workplace Health and Safety Legislation and Environment obligations, are included in the rates.

By definition these revised compliance requirements cannot be embedded within the 1996 and 1999 rates, and care needs to be taken to ensure these rates and their successors (such as the SKM Price Book) reflect these revisions.

5.4. Adjustment Factors

Ergon Energy supports the use of adjustment factors for rugged terrain etc, although we do not yet fully understand how these will be applied.

5.5. Defunct Construction Types

There are a number of construction types which are no longer built by Ergon Energy, although some older assets may still be in service.

For example, Ergon Energy no longer builds open wire low voltage - all overhead low voltage is now constructed with Aerial Bundled Cable (ABC), which is common practice around Australia.

Ergon Energy considers that the MEA should reflect common modern practices.

5.6. Use of "Greenfield"

The Discussion Paper uses the term “greenfield”, and assumes a greenfield site in the determination of MEA unit rates.

The paper seems to have two meanings for greenfield.

- The first being applied to *network layout*.

  Greenfield means that, given the current placement of customers, what would be the most efficient network layout to apply. The opposite of this approach is the concept of incremental development. The last valuation adopted an incremental approach.

- The second approach applies to the *nature of the construction*.

  Greenfield means that there are no buildings or other assets around to complicate the construction process. The opposite of this approach is “brownfields”. The last valuation adopted a brownfields approach as the cost basis for unit rates (see section 4.3).

Ergon Energy contends that both the "incremental" and "brownfields" approaches apply for this valuation.

How to apply brownfield factors will require some discussion amongst the distributors and SKM.

6. DETERMINATION OF STANDARD ASSET LIVES

Ergon Energy concedes that other jurisdictions have generally had longer standard lives than Queensland in the past. At this stage, we do not have much information on the population of poles or other items of plant that have been replaced, so we are not in a position to comment on this change in standard asset lives[2].

Ergon Energy agrees with SKM’s assessment of the effects of removing the minimum remaining life. If assets are in good enough condition to remain in service until the next inspection, they should be allowed to do so. The minimum remaining life concept removes any perverse incentives to replace these assets.

Furthermore, Ergon Energy supports five years as the minimum remaining life on the basis that this is the normal inspection cycle for assets. Ergon Energy, for the time being, has reverted to a 3 year inspection cycle to collect information on the network and find defects on the system that may have been missed in the past.

[2] Although there is some anecdotal evidence to suggest that transformer lives are reducing rather than increasing due to tighter engineering tolerances on new design transformers, unlike the older transformers.

Average ages for building blocks will be calculated from the average of the ages of the discrete elements of the building blocks – and this happens after those assets with less than five years of remaining life have had their remaining life adjusted to a minimum of five years remaining life.

7. OPTIMISATION PROCESS

7.1. "Incremental" vs "Greenfield" Optimisation

In accordance with our comments in clause 5.6 above, Ergon Energy supports the "incremental" approach as adopted at the last valuation with respect to valuing the in-situ assets.

7.2. "Economic" Ratings vs "Technical" Ratings

Ergon Energy in the recent past has rationalised the number of conductors that are used to string our lines.

Factored into the analysis of the selected optimal conductors was the cost of losses. This was done because it reflects good engineering practice, not because there are financial drivers or incentives to do so.

We support adopting an "economic" rating for valuation purposes because this approach endorses good engineering practice, and should be encouraged.

7.3. Optimisation Planning Horizons

Ergon Energy supports the proposed planning horizons of:

- 5 years for distribution level assets
- 10 years for zone substations, and
- 15 years for subtransmission assets.

These are the same as for the previous valuation and are consistent with good engineering practice.

It is also consistent with the National Electricity Code's clause 5.6.2(d) which states "The minimum planning period for the purposes of the annual planning review is 5 years for distribution networks and 10 years for transmission networks".

7.4. Network Security, Reliability and Quality of Supply

The discussion paper assumes "that the present levels of reliability and quality are acceptable and to be maintained", and hence "the present network planning criteria should be used as the measure against which the optimisation of equipment and configurations would be conducted".

Ergon Energy currently has assets, optimised down or out at the last valuation according to planning criteria, yet were required and used to maintain current levels of service quality.

For example, the 66kV line from Calen to Pinnacle, a line optimised out of the asset base, is used to maintain a more reliable supply in the region than there would be if it were not there.

Ergon Energy therefore submits, that in order to achieve what the paper suggests, that certain assets, which are required for reliability purposes, should not be optimised down or out on planning criteria alone.

7.5. Optimisation of Non-Network Assets

Ergon Energy considers that a process of optimising non-network assets would be difficult and impractical.

Furthermore, optimisation only makes sense when applied to a DORC valuation – not to a book value.

Conversion of non-system assets from book value to DORC value requires a considerable effort with perhaps little to gain. (It is debatable whether there would be any net benefit in write-up to DRC followed by a write-down to DORC.)

Therefore, Ergon Energy proposes that whenever book value is used, that no optimisation be applied.

8. BROWNFIELD FACTORS

In accordance with our comments in clause 5.6 above, Ergon Energy supports the "brownfields" approach as adopted at the last valuation with respect to valuing the unit rates.

9. STAGED DEVELOPMENT OF ASSETS

9.1. Length of Line

The network expands little by little as required by customers. We believe the average length for an 11kV extension is about 2-3 spans.

Unit rates should reflect this incremental development, which has already been acknowledged in the discussion paper as applying to distribution networks.

Ergon Energy considers that the calculation of the MEA unit rate should be done on the average length as historically constructed.

9.2. Staging Costs

The discussion paper says that staging costs are typically an issue for larger infrastructure projects where the project extends over a period of years. Ergon Energy believes this statement confuses two issues:

- Staging that is caused by an extended period of construction on major infrastructure (as indicated by SKM in the Discussion Paper); and
- Staging that is caused by the progressive construction of a single asset through various expansion phases via various projects (eg. feeder that is built in length increments).

Ergon Energy believes this latter case is more significant, because of the repeated requirement to meet mobilisation costs, which comprise a significant share of total costs. Contrary to SKM's view in the Discussion Paper, Ergon Energy considers the staging of costs is more a distribution problem, than a transmission one, as transmission construction is typically a single stage construction taking some longer period of time.

Ergon Energy believes that not to include the staging costs for both situations, is to deny the asset its true cost and requests that staging costs be included.

10. LAND ISSUES

The discussion paper proposes to review the land valuation already present in the accounts - rather than carry out a full revaluation. For reasons that we will outline below this methodology is not appropriate for Ergon Energy.

The discussion paper says “it appears that Ergon Energy has adopted the unimproved capital value as determined by the Department of Natural Resources and Mines as the land value”.

This statement is incorrect.

The value of the asset in our books has remained at its original acquisition price of the predecessor Corporations. We understand that there had been opportunities to revise these values, but our directors chose to leave the value at the original cost. The purchase by Ergon Energy Corporation Limited of the various predecessor corporations' land assets took place at book value, embedding the original acquisition cost in the new consolidated corporation.

However, it is difficult and costly to revalue land all at once, and it is acknowledged that the cost of doing the valuation may outweigh the benefits. But at some stage, the divergence between book land values and the market price needs to be addressed.

One solution would be to include an initial valuation of part of the portfolio (see below) and to propose the incorporation of further annual valuations progressively so that the total portfolio is valued prior to the next regulatory rest.

Ergon Energy has had its registered valuer conduct a valuation of a portion of the land asset base - this comprised about 70% of the land asset valuation.

We propose that the valuer should incorporate Ergon Energy's 70% partial valuation in its deliberations when arriving at the 2003 valuation.

11. ALLOCATION OF SHARED ASSETS

The discussion paper proposes two options for the allocation of shared assets. Ergon Energy favours the first approach, because of the dynamic nature of the Ergon Energy group and the associated use of assets.

For example, the Technical and Distribution Services group (TADS) use distribution assets on behalf of external parties. This use varies greatly from year to year. Any prior allocation of this external use would be little more than guesswork. Ergon Energy has an internal charging method for asset use that accommodates this variable use.

This charging method is incorporated into *Ergon Energy's Regulatory Cost and Revenue Allocation Principles* and was approved by the QCA.

It is apparent that Energex and Ergon Energy have different methodologies in handling this matter. It is appropriate to treat the distributors differently in this matter.

12. INTEREST DURING CONSTRUCTION

Ergon Energy agrees that, as stated by the issues paper, and as used in other recent Australian electricity business valuations, interest and other financial charges should be included in the valuation.

Some distribution projects take in excess of one year to commence and complete, and Ergon Energy considers that interest during construction ought to apply for these situations.

This is supported by AASB1036[3], which allows directly attributable borrowing cost to be capitalised into the asset.

13. DEPRECIATION METHODOLOGY

Ergon Energy, subject to the comments below, advocates straight-line depreciation for the next valuation.

Having said this, we acknowledge that renewals annuity offers an improved paradigm for the regulatory environment. This approach is one that requires a consensus among all the related parties to the regulatory process. The QCA, the distributors and the accounting profession need to agree and work towards this change for it to happen.

This methodology requires a 25 year asset management plan, and therefore extensive knowledge of future network operating conditions and expansion and customer requirements. Ergon Energy is open to exploring with the regulator the process by which we can move to this new approach.

An assumption built into the straight-line depreciation method is that DORC is derived in the same manner. That is, the value of DORC is derived from the ORC by strict application of a straight-line depreciation. In other words, the building block "depreciation" and the building block "Return On Assets" are driven by the same basic assumption about the shape of depreciation.

However, there is an emerging line of thought that proposes a different understanding. This line of thinking breaks the link between the two building blocks by suggesting that a DORC is derived by another method called the "Hypothetical New Entrant" method.

Here Ergon Energy acknowledges that this is also a new paradigm. Therefore, in order to avoid serious misunderstandings of each parties' motives, this matter should be investigated together with the QCA.

[3] Australian Accounting Standards Board (AASB) 1036 Borrowing Costs.

14. ROLL FORWARD METHODOLOGY

While Ergon Energy agrees with the concept of roll forward, and the necessity of doing this, there are a number of practical issues associated with the methodology that need to be addressed. They include:

14.1. The conversion of Capex into the asset valuation building blocks format.

This may not be the concern of the valuer, but is worthwhile from the point of view of Ergon Energy.

Having Capex expressed in terms of the building blocks allow the following advantages:

- allows accurate calculation of depreciation using the building block lives;
- accurate starting points for future valuation confirmation;
- allocation of costs to customer levels;

all adding up to better modelling.

Ergon Energy proposes that a set of allocation rules be agreed with the valuer to convert the forecast Capex into building blocks (together with the associated standard lives), and estimate an updated count.

14.2. Timing of the confirmation of Capex from 1 January 2004 to 30 June 2004.

As previously indicated, the confirmation of the Capital expenditure for this six months may not be available until some time after July 04, depending on accounting processes.

This should not cause too much of a problem because a close estimate can be used based on budget forecasts. The differential between a 6 month budget estimate and the actual cost for that period would be very small, particularly in relation to the total asset base. Of course once the final figure is known, the regulatory models can be updated.

14.3. Measurement of Capex Expenditure from 1 July 2004 to 30 June 2005

Ergon Energy and the valuer need to agree on how the Capex spend for the period 1 July 2004 to 30 June 2005 is to be estimated and incorporated into the valuation.

This has not been addressed in the Discussion Paper.

14.4. The relationship between WIP (at 31 December 2003) and Capex for 18 months 1 January 04 to 30 June 05.

Rules need to be developed to calculate the apportionment of WIP at 30 June 2005 within the allowance for Capex.

One simple solution would be to assume that the WIP at 31 December 2003 remain at the same level at 30 June 2005. This would mean that Capex for the 18 months only has to be converted to building block form.

15. VALUATION OF EASEMENTS

Ergon Energy has made a submission on the valuation of easements and we await QCA's decision.

16. RECOGNITION OF CAPITAL CONTRIBUTIONS

Ergon Energy agrees with SKM's assessment of the difficult issues (legal, insurance, access) associated with assets being owned by different parties.

We support the continuation of the current arrangements for recognition of capital contributions, because it is accurate and simple.