20 April 2001

Mr Michael Rawstron
General Manager
Regulatory Affairs – Electricity
Australian Competition and Consumer Commission
PO Box 1199
DICKSON ACT 2602

Our ref: R-01-064

Dear Mr Rawstron,

CONSULTATION ON ACCC REGULATION OF THE QUEENSLAND TRANSMISSION NETWORK – TRANSMISSION REVENUES

We refer to the request for comment from interested parties on Powerlink Queensland's *"Application – Transmission Network Revenue Cap – Commencing January 2002"* ('the Application').

We thank you for the opportunity to provide comment on the Application and we ask that you accept this letter and the attached document as a submission on both the Application and supporting documentation by Ergon Energy Pty Ltd and Ergon Energy (Victoria) Pty Ltd (collectively referred to as 'Ergon Energy'). Ergon Energy is the holder of a Retail Licence/Authority and participates as a Retailer in all National Electricity Market Jurisdictions (with the sole exception of South Australia).

We note that the ACCC is in the process of releasing further reports on Asset Valuation Consultancy and Service Standards Consultancy and we confirm that once reviewed, an additional submission will be provided on these reports by 4 May 2001.

We would appreciate the opportunity to meet with the ACCC to discuss our concerns regarding the Application. In the interim, please feel free to contact me on (07) 3228 8116 or Sandra Heymer on (07) 3228 8259 should you have any queries.

Yours faithfully,

Darren Barlow
Manager Regulation
Strategic Business Development Group

ERGON ENERGY PTY LTD
ERGON ENERGY (VICTORIA) PTY LTD

CONSULTATION ON ACCC REGULATION OF THE QUEENSLAND TRANSMISSION NETWORK – TRANSMISSION REVENUES

1.0 INTRODUCTION

We refer to the request for comment from interested parties on the *"Application – Transmission Network Revenue Cap – Commencing January 2002"* ('the Application'), submitted by Powerlink Queensland ('Powerlink') to the ACCC for consideration.

We thank you for the opportunity to provide comment on the Application and we ask that you accept this document as Ergon Energy submission on both the Application and supporting documentation. 'Ergon Energy' refers to Ergon Energy Pty Ltd and Ergon Energy (Victoria) Pty Ltd.

Ergon Energy is the holder of a Retail Licence/Authority and participates as a Retailer in all National Electricity Market Jurisdictions (with the sole exception of South Australia).

Our submission focuses upon those areas where Ergon Energy has either formed an opinion or has comment to make. We have not commented on those sections on which we have no issue or specific comment to make at this point in time. Ergon Energy will, of course, give consideration to further comment as part of any subsequent consultation process.

2.0 REGULATORY CONTROL PERIOD

Ergon Energy supports Powerlink's proposals that:

- the ACCC adopt a regulatory control period of 5½ years; and
- each regulatory year of the regulatory control period be aligned with a full financial year ending 30 June.

These measures will assist in providing participants and customers with regulatory certainty and minimise the cost of the regulatory process. As identified by Powerlink in its Application however, the proposed approach will necessitate a decision as to the treatment of a 6-month transition period from the Electricity Reform Unit's ('ERU') existing determination as interim regulator to that of the ACCC.

Of the alternatives presented, Ergon Energy supports the ACCC's application of ERU's existing regulatory assessment for the period 1 January 2002 to 31 December 2002.

We note Powerlink's concerns that the existing determination is *"sub-economic"* which implies the movement from ERU's determination to that of the ACCC will cause a potential price shock, irrespective of the time period used (our general concerns regarding price shocks are discussed under Item 10 below). We believe that the ACCC can address the most appropriate means of ensuring that a reasonable glide-path between the existing determination occurs as part of the current revenue determination process. That is, prior to the commencement of the regulatory period, there will be a reasonable basis from which an expectation as to revenue can be determined and this can then be used to ensure a 'smoothing' of the effects of transition from once regime to another.

3.0 BUSINESS CHARACTERISTICS

Powerlink in its Application argues that it *"is the most efficient transmission entity in the National Electricity Market, and one of the most efficient stand-alone transmission entities in the word"*. In relation to the suggested efficiencies that have been and can be achieved, we comment that:

- **Geography** – While we acknowledge that transmission distances will be an important contributing factor to Powerlink's costs, greater consideration is required of the means by which the marginal increase associated with the expansion of infrastructure can be minimised. For example, the expansion of infrastructure into locations distant from established maintenance depots and service facilities is claimed to result in higher maintenance costs, however, methods for minimising these increases do not appear to have been explored.

- **Supply and Demand** – We agree with Powerlink's statements regarding Queensland's reasonably flat daily load curve. As to the implications of this on maintenance and augmentation however, we comment as follows:

  - We believe that the level of predictability associated with the 'non-spiky' pattern of demand in Queensland would lead to a steady increase in utilisation, predictable augmentation requirements and a more certain recovery of the marginal cost increase due to new augmentation. This would be a major advantage to Powerlink in its ability to manage price shocks due to augmentation and planning. That is, while step changes in demand are to be expected, the associated step change cost for augmentation might be expected to be less than in those States that display greater seasonality to meet peak demand (and thus recover substantially greater asset costs over a lower load volume, increasing transmission costs of augmentation).

  - The Application estimates an annual increase in demand of around 220MW. Of this annual increase, we believe that the take-up will be located primarily in urban areas. Of the take-up of load that is 'lumpy' rather than smooth (eg through large projects), the majority of demand is likely to be located close to generation and therefore would not be driving a major increase in capital expenditure to bring the demand on-line.

  - While we agree that the Queensland grid's exposure to high loads for longer periods than other networks will result in a greater probability that outages will lead to load shedding and constraints, we believe that:

    – It is the flat load (and high average capacity usage) that exacerbates the effect of the outage rather than the need for a higher level of availability or service, which is a separate issue.

    – The increased capacity usage should lead to a lower average cost per MWh transported (over the relevant distances) and a low cost recovery of network asset costs.

    – Increased maintenance (compared to a less heavily utilised system), should only follow if it can be demonstrated that maintenance is effective in

procuring better reliability (reduced loss of load) from the assets (and existing capital).

– There is only a need for *"inherently more investment in grid components"*, to the extent that existing assets (properly employed) do not produce the desired level of efficiency.

We believe that these factors will interact to assist Powerlink in its ability to manage augmentation, planning and any accompanying price shocks.

- **Utilisation of Assets** – We believe that there are a number of inconsistencies in the Application's commentary regarding the utilisation of assets. In particular:

  - There are numerous statements in support of claims regarding historical cost savings that do not appear to be supported in the Application. For example, *"the small amount of assets employed"*, *"very high efficiency with its supporting functions"* and *"other grids… would typically have multiple control centres"*. Evidence must be provided (in a transparent form) to support these statements, as the efficient utilisation of assets is integral to Powerlink's claims regarding its historic performance and the scope its historic performance provides for achieving future efficiencies.

  - Comment is made that *"consolidation of the depots and offices in recent years has resulted in considerable ongoing cost savings"* (page 12). On the face of it, this appears to be inconsistent with the comment on page 6 of the Application that expansion of Powerlink's infrastructure into areas *"much more distant from the established maintenance depots and service facilities"* has resulted in *"higher maintenance costs to deliver a consistent service standard"*. It is inappropriate for Powerlink to claim this as both an historic efficiency and a contributor to increased costs.

  - A *"significant component"* of Powerlink's transmission assets are stated as being more than 30 years old, requiring provision for replacement or refurbishment. An examination of Powerlink's asset age profile in Figure 3.5, only about 15% of the transmission assets were commissioned more than 30 years ago.

  These are issues that must be clarified before any finding can be made regarding the efficiency of Powerlink's utilisation of assets.

- **Transportation** – The Application characterises electricity transmission as a 'transportation' activity. This in turn underpins Powerlink's assessment of its cost drivers. In relation to this, we note that:

  - New South Wales is used as a comparison with Queensland for load densities and cost of transportation. We query whether the conclusions drawn in the Application regarding these issues would be similarly supported by a comparison of Queensland's transmission network with that of the remaining States.

  - Powerlink suggests its efficiency is to be gauged in terms of its provision of electricity 'transportation'. In addition to overall efficiency, we believe greater consideration is required of Powerlink's role in providing transportation services

that create efficient market outcomes. That is, the delivery of network performance outcomes that are aligned to market needs. For example:

- the provision of firm access to electricity transportation to participants; and
- scheduling of network outages outside of periods of peak demand or high pool price events/periods.

While the Application touches on these issues in its discussion of service standards and in Powerlink's claim for higher Opex, we believe that inadequate consideration has been given to Powerlink's current management of these practices, particularly in the efficiency measures implemented to date.

We do not believe that Powerlink's claim for increased Opex can be considered in isolation from the measures that have and should be employed by Powerlink in carrying out its transportation function in order to achieve efficient outcomes for the market.

- **Operating Costs** – Ergon Energy agrees that low operating costs may be a reflection of efficiency measures implemented by a transmission network service provider ('TNSP'). We are concerned however that Powerlink has placed too much emphasis on the overseas experience of a higher ratio of operating costs to transmission network asset value in drawing the conclusion that it is *"setting the efficiency standard for transmission entities in the Australia/NZ region and internationally"*. Factors such as the age, construction and kilometres of line within a network will impact on the asset value/operating cost ratio of a TNSP and must be analysed to substantiate the comparisons drawn.

While we acknowledge that there are business and network characteristics that impact on Powerlink's revenue cap, further investigation is required of the extent to which these factors 'drive' the costs incurred by Powerlink in efficiently developing, operating, maintaining and protecting its transmission grid and provide scope for efficiencies within the regulatory control period and into the future.

4.0 THE COST OF CAPITAL

Powerlink premises the Application's analysis of the cost of capital on the argument that the risks faced:

> *"…are much larger than for other recently assessed transmission and distribution networks. On that basis, the WACC for Powerlink needs to be significantly higher than for other networks".*

Ergon Energy does not agree with this assessment for the following reasons:

- Powerlink raises the prospect of decreased competition in transmission if a rate is set below the risk-weighted cost of funds in the market. We suggest that the primary reason that TNSPs are regulated is that bypass of the TNSP as service provider and accordingly, effective competition, is generally not possible. We therefore believe that this justification for increased risk should have no weight in the assessment of WACC.

- Powerlink maintains that its regulated network business faces materially higher levels of risk than other network service providers. In relation to the contributing factors listed:

  - The risks alleged by Powerlink need to be categorised as diversifiable and non-diversifiable. It is only non-diversifiable risk that should be captured by the concept of self-insurance.

  - The benefits associated with a higher loading and steady income stream in the Queensland network need to be considered.

  - "Overs and unders" arrangements supporting annual revenue requirements reduce cash flow risk.

  - We reject the claim that high daily and annual load factors:

    > *"substantially increases the likelihood that network owner[s] may face unforeseen liabilities if unpredictable network outages cause market constraints and/or load shedding"*.

    Powerlink as a TNSP is generally protected against liabilities for such network outages. For example, in circumstances involving NEMMCO intervention under the National Electricity Code ('the Code'); within the parameters of the security/operating criteria under Chapter 4 of the Code and the planning and development standards under Chapter 5; the broad protections contained in the *Electricity Act 1994*; and via recommendations from the MSORC Review on behalf of the jurisdictions.

  - While we acknowledge that there is uncertainty surrounding future generation construction and the 'retirement' of existing plant, the analysis leading to 72 possible scenarios provides a range of potential outcomes that could have applied a cross-impact probability analysis to remove less certain possibilities and therefore significantly reduce this risk.

Ergon Energy's concerns regarding Powerlink's cost of equity capital emanate from what we believe to be an overstatement of the risks faced by Powerlink in carrying out its functions (relative to the risks faced by other participants) with little or no weight given to the benefits that may accrue from its monopoly position. We do not believe that Powerlink has substantiated that it faces higher risks than those faced by other recently assessed transmission and distribution network service providers, warranting a higher WACC.

In assessing the cost of equity capital, this overstatement of risk primarily translates itself into a high equity beta value of 1.12 – a figure higher than the asset betas of similar network service providers. Ergon Energy argues that the equity beta must be adjusted down to reflect the true level of risk faced by Powerlink.

5.0 COST ALLOCATION PRINCIPLES

We are concerned that acceptance by the ACCC of the 'Avoidable Costs' approach will result in costs that should rightly be allocated to the non-regulated functions of Powerlink being 'stacked' onto the regulated business. We believe that this is a risk

inherent in a de-facto marginal cost approach where only *"some major lines of non-regulated activity"* will be checked using a 'Commercial Cost Comparability' methodology. No information is provided as to the lines of non-regulated activity that will or will not be verified in this manner or an appropriate methodology to ensure some form of censure on the potential for these costs to be inappropriately allocated to the regulated business.

We also note that in reviewing Powerlink's overhead allocation methodology, PB Associates concludes that Powerlink's internal rates are *"within 10 – 15% of the external service provider rates"*. A possible premium of 10 – 15% appears to Ergon Energy to be of concern.

We encourage the ACCC to adopt an approach that more appropriately deals with the issue of allocation. Ergon Energy suggests that the 'Commercial Cost Comparability' methodology should be adopted as the primary means of allocating all commercial overhead costs rather than this methodology merely acting as a 'check' on some lines of non-regulated activity.

6.0 OPENING ASSET BASE

Ergon Energy does not support the proposed method of calculating the opening asset value. In particular:

6.1 Easements

Ergon Energy believes that Powerlink's request of a 73.15% increase in the ORV and ODRC allocated under the ERU valuation should be rejected. In relation to the arguments put forward by Powerlink in support of this increase, we comment that:

- Although the Application refers to a detailed study undertaken to determine an appropriate transmission line easement valuation based on indexed DAC, this study has not been made available to participants for comment. Without this information, it is impossible to reconcile the valuation that is representative of indexed DAC with the revised figures contained in Table 6.3. In the absence of this information, we are only able to presume that the revised valuations in Table 6.3 represent indexed DAC, rather than ODRC.

- Ergon Energy does not believe that the use of DAC indexed for inflation is appropriate:

  - The Accounting Standards do not permit the depreciation of land. We believe that treatment by the ACCC of easements should not be inconsistent with any generally accepted accounting principles regarding the treatment of land.

  - The indexation proposal is based on the presumption that the land in question will be consistently subject to inflationary effects. As Powerlink's easements are largely located in rural and remote regions, we do not believe that a positive increase in land valuations will naturally follow with the passage of time.

- As discussed in greater detail under Item 10 below, Ergon Energy is concerned that the impact of these increased valuations on network charges will be significant, creating unintended economic consequences including price shocks for consumers.

Accordingly, for the current regulatory period, Ergon Energy believes that easements should be valued at historic cost (that is, the amount actually paid to gain the easement) without an indexation adjustment. This view is supported by the recent Draft Determination of the Queensland Competition Authority on *"Regulation of Electricity Distribution"*.

6.2 Indexation and Acquisitions

In calculating the 1 July 2000 opening value (Table 6.5), Powerlink has failed to provide any justification for the indexation amounts added to the 1 July 1999 'sunk assets' or the basis from which the indexation amount has been calculated. Indexation should not be granted 'as of right' on these asset classes.

We also suggest that, in settling the amounts for 'asset acquisitions' to be added into the cost base, a 'purchase at least cost' approach should be adopted. The Application is silent as to whether this has occurred.

6.3 Management Induced Efficiency Gains

Ergon Energy rejects Powerlink's inclusion of a $40.5M capital saving in the regulated asset roll forward, claimed to arise from management induced efficiency gains.

We do not believe that Powerlink has *"clearly demonstrated"* that this alleged capital expenditure shortfall is the result of management efficiencies or innovation. In particular:

- Further evidence is required of the efficiencies that are claimed to have been created as well as analysis of whether these are actual efficiencies or whether they are merely a reflection of an initial overstatement in the project cost estimate. Regardless of the independent nature of the initial project cost estimate, analysis is required to capture any factors likely to have influenced capital costs between cost estimate and commissioning.

- The saving of $6 million resulting from management's choice of contractor despite the alleged 'risk' of limited previous experience is questioned. We note PB Associates' recognition that the contractor chosen is a subsidiary of a *"well-known international company with significant experience in the construction of large transmission line projects outside Australia"* and, in light of this, we do not believe that the risk associated with using this contractor in fact existed. Any claim for management efficiency in this instance appears spurious.

- We do not accept that the use of an inferior quality of steel, contrary to industry accepted standards regarding the mix of imported and Australian steel on large projects, should be accepted as a management induced efficiency gain. Indeed, this leads us to question whether the risk associated with the use of 100% imported steel may result in medium and long-term maintenance inefficiencies.

Ergon Energy is also of the firm view that the benefit of any capital expenditure shortfall must be shared with customers, not captured 100% by Powerlink. Powerlink's inclusion of the $40.5M in the regulated asset roll forward effectively represents a wealth transfer from customers to Powerlink over the course of the regulatory period. We suggest that,

at a minimum, 50% of these gains be shared by customers with 100% to customers in the next regulatory period.

7.0 CAPITAL EXPENDITURE

7.1 Capex Forecast

As a general comment, Ergon Energy agrees that the uncertainty surrounding the location and timing of necessary network augmentations, generation capacity construction and the associated 'retirement' of existing plant, makes Capex forecasting difficult. For this reason, we support the use of a probabilistic style approach to forecasting future expenditure levels, as proposed in the Powerlink paper *"Forecasting Capital Expenditure for the Queensland Transmission Grid"*.

We have the following comments regarding Powerlink's application of the probabilistic approach to forecasting expenditure levels:

- The outcomes of any probabilistic forecasting must be demonstrated as being reasonable by benchmarking against the Capex levels of other transmission systems in terms of both absolute level and asset-specific costs. We are not convinced that this task has been adequately undertaken by Powerlink.

- In assessing future capital expenditure requirements, reference must be had to the impact of Powerlink's transmission plans on concurrent market developments. This is particularly the case with grid support and the alleviation of constraints. For example:

  - The decision-making processes employed by Powerlink regarding constraints and their removal via augmentation will need to address NECA's proposals for a revised regional boundary structure and revised criteria for 'triggering' the creation of a new regional boundary (the REIMNS Review). We are concerned that generation grid support effectively results in the creation of an artificial constraint that may distort the regulatory test and investment signals intended to result from the REIMNS Review.

  - Undertaking capital expenditure in a manner that supports or enhances the ability of the market to manage risk. For example, the increased availability of transmission assets leading to an increase in 'firmness' for units sold under the Settlement Residue Auctions.

  These are variables that will need to be factored into the process that drives Powerlink's decisions regarding Capex expenditure to ensure a maximisation of appropriate outcomes for the market as a whole.

- The tests used to 'check' the reasonableness of the Capex estimate (ie ORV divided by 40 years for replacement and ORV x 3.5% x 75% for augmentation) can only be regarded as reasonable guides if the opening asset base is accepted. As raised in Item 6 above, Ergon Energy has serious reservations regarding these figures, particularly the application of indexation.

Using the figures provided by Powerlink, the forecast for the regulated Capex and asset roll-in represents a 57.9% increase over the regulatory control period of 5 years, an increase that will inevitably have a significant impact on network charges.

7.2 Adjustment for Actual Capex

Ergon Energy supports the setting of a review period to ensure the Capex forecast remains reasonable in light of actual transmission augmentation requirements. In considering the formularised approach proposed by Powerlink in the Application, we believe that the Review:

- Should focus solely on the Capex element of the revenue cap and must avoid becoming a full review of the original determination.

- Specifically considers the price shocks that may flow from the adjustment process and addresses the means by which these will be mitigated.

- Ensures that an adjustment is triggered not only where the difference between actual and estimated Capex exceeds 5% of the estimated quantity, but also where it is 5% lower than the estimated quantity.

8.0 OPERATING AND MAINTENANCE EXPENDITURE

Powerlink's Opex as a percentage of transmission assets is stated as having historically improved by 7.2% per year due to:

> *"…a combination of effectively harnessing economies of scale as the network expanded and applying operational and maintenance efficiency initiatives identified from active participation in international benchmarking."*

There are however inconsistencies/inaccuracies in the information presented by Powerlink to support the arguments regarding historical efficiency gains:

- There is inconsistency as to the manner in which direct maintenance costs are characterised. On page 88 of the Application, it is argued that the State-based regulatory environment has put significant pressure on the ongoing reduction of Opex while on page 91 a contrary argument is put forward where management efficiency is stated as the driver for the fall in direct maintenance costs. We suggest that Powerlink cannot provide alternative arguments of State under-investment and management efficiency gains as reasons for lower Opex and expect increases in Opex to be approved by the ACCC as a consequence.

- The location of network assets away from existing maintenance support centres/depots is stated as a reason for a reduction by the end of the first regulatory period in the historical improvement of the Opex/transmission asset percentage. This does not appear to accord however with Powerlink's claim that two of the major efficiency gains over recent years have been a 70% outsourcing of maintenance work and the consolidation of depots into a single site.

- We note that Figure 8.7 is presented to illustrate that Powerlink sits well below the average in operating and maintenance spending per circuit kilometre. We suggest that the 'average' of 1.00 has been overstated due to the inclusion of one

participant with a normalised cost of more than 2.50, significantly inflating the 'average' against which Powerlink is compared. As a general comment, we believe that it would be natural to expect that a transmission entity with a large network would have a lower ratio of spending per kilometre than a smaller network due to marginal increases in operating and maintenance costs.

Ergon Energy disagrees with Powerlink's argument that *"there are few, if any, opportunities for further efficiency gains"* – we believe this needs to be justified.

9.0 DEPRECIATION

Ergon Energy supports the methodology adopted by Powerlink to deal with the issue of depreciation.

10.0 PRICE SHOCKS AND COMPETITION

Powerlink's unsmoothed revenue requirements (Table 10.8) represent a 12% increase from ERU's existing determination to that requested of the ACCC in year 1 of the regulatory control period. The total request across the regulatory control period represents a 14% cumulative increase per annum. Increases of this magnitude not only raise concerns regarding whether such a high transitional and annual increase can be substantiated, but also regarding the implications for customers and the market as a whole.

Ergon Energy remains concerned that the impact of these increased revenue requirements on network charges will be significant, creating unintended economic consequences including price shocks for consumers. Powerlink in its Application did not address the issue of price shocks. If Powerlink were in a competitive market as it suggests when arguing WACC, then price increases of this magnitude would result in new entrant competitors. Clearly, Powerlink is a monopoly (ie non-competitive) and price shocks such as those suggested must be considered in the context of total delivered energy costs for customers. We do not believe that 14% cumulative annual price increases are fair or reasonable.

Having said this, we recognise that any change from the existing determination requires consideration with respect to glide-paths. While Ergon Energy encourages the establishment of a glide-path as part of the current revenue determination process in an effort to mitigate the impact of price shocks, we believe that Powerlink's proposals have the potential to adversely effect competition, regardless of the extent to which the revenue requirements are 'smoothed':

- Existing contestable customers will become immediately exposed to increased TUOS via pass-through. While affecting all contestable customers, this will have a material impact on those customers for whom the benefits of contestability are currently marginal.

- Any increase in price will have an adverse impact on competition and customer perceptions regarding the benefits of moving to the contestable market and the entire deregulation process. This will be particularly apparent upon the introduction of full retail competition where residential customers are unlikely to see significant savings without even considering the impact of increased TOUS.

- Any step-change in TOUS coinciding with the introduction of full retail competition will be perceived by the public as a direct result of the introduction of competition. This will only serve to distort price signals and exacerbate public apprehension regarding entry to the contestable market and deregulation of the electricity market.

As stated previously, consideration is required of the impact of Powerlink's proposals on customers in the form of price shocks and the manner in which it may adversely influence or distort outcomes from concurrent market developments.

11.0 CONCLUSION

While supportive of many aspects of the Application, Ergon Energy remains concerned that inadequate consideration has been given to the following issues:

- The Application and Powerlink's approach to calculating revenue requirements inadequately consider Powerlink's role in delivering network performance outcomes that are aligned to market needs.

- Further investigation is required of the scope for achieving efficiencies within the regulatory control period. We do not believe that Powerlink can argue that management efficiency gains have reduced Opex while suggesting that the ACCC should approve an Opex increase.

- There has been an overstatement of the risks faced by Powerlink in carrying out its functions. We do not believe that Powerlink has substantiated that it faces higher systematic risks than those faced by other recently assessed transmission and distribution network service providers, warranting a higher WACC.

- The significant impacts on TUOS of the proposals, the unintended economic consequences and price shocks created and the effect of this on competition.

Ergon Energy welcomes the opportunity to comment and would appreciate the opportunity to participate in any subsequent consultation by the ACCC on the Application. We note that the ACCC is in the process of releasing further reports on Asset Valuation Consultancy and Service Standards Consultancy and we confirm that Ergon Energy will provide additional comment on these reports by 4 May 2001.