Hydro Tasmania
the renewable energy business

14 May 2003

Mr Sebash Shivasabesan
Director Electricity
Regulatory Affairs Division
Australian Competition and Consumer Commission
PO Box 1199
DICKSON ACT 2602

Dear Mr Shivasabesan,

Transend Networks' Revenue Cap Application: Capital Expenditure

Thank you for the opportunity to discuss further Transend Networks' Revenue Cap Application ("Application") forecasts in respect of capital expenditure ('capex') recently. This letter encapsulates the key concerns that were expressed in our meeting in respect of the capex forecasts, and highlights the areas where we consider further information should be made publicly available.

The order of projects referred to in this letter follows the order of the Application, with relevant section referenced.

1 Development capex forecasts
Fixed Projects

1.1 Southern 220kV Augmentation *(Page 53, Table 6.2)*

As Transend notes, the supply to the Hobart area is becoming increasingly less secure. However, Hydro Tasmania is concerned that the expenditure forecast in the Application in respect of this project may not occur. Our concerns relate primarily to delays and uncertainties in the approvals for this project. This provides the opportunity to develop lower cost alternatives (which may also be more flexible, have shorter lead-times and reduced approval risk) to meet changing system needs over time.

- It is understood that the Southern Augmentation project (as detailed in the Application) has not been fully endorsed by the Tasmanian Reliability and Network Planning Panel (RNPP), nor approved by the Tasmanian regulator. We understand that the RNPP's endorsement was contingent on other developments in the Hobart area and planning/environmental approvals.

- If the Southern Augmentation project is subject to a further approval process, there are lower cost network and non-network alternatives that should be considered to address the system deficiencies that the Southern Augmentation is intended to address. These could include:
    - The development of a gas-fired generator near Hobart, as envisaged in one of Transend's variable projects;
    - Alternative upgrading/modification/reconfiguring of existing transmission infrastructure to increase security (rather than needing to seek new easements for transmission lines)
    - A combination of capacitor banks and single circuit 220kV development around Hobart;
    - Reduction in load at Pasminco, either under contract as part of normal operation, or to avoid any increases in charges that result from the Southern 220kV Augmentation.
    - Development of suitable contingency plans to mitigate risk of prolonged outages

It is recognised that it is not the Commission's role to second guess the planning function of a TNSP, or to propose alternative plans. However, these issues do seem to cast doubt on the likelihood of the Southern Augmentation requiring the forecast levels of expenditure in this review period.

1.2 NEM Entry ***(Page 54, Table 6.3)***

- *Inter-company metering – Transend/Aurora interface*

  The Application has not included reference to assets required as part of metering installations (instrument transformers and associated cables panels and wiring) for Hydro Tasmania's market connection points on Transend sites (Transend/Hydro Tasmania interface).

  It is understood that, in this type of circumstance, Hydro Tasmania may agree with Transend on the treatment of these assets on their property as either contestable or regulated and that either treatment would be acceptable to the Commission.

  It is further understood that the regulated treatment would be the default position adopted by the Commission if the parties could not agree on terms in relation to treatment of these assets as "contestable". On that basis, we would, given the current early stages of negotiation, encourage the Commission to consider including these assets in Transend's regulated asset base.

- *Quality of supply monitoring, State estimator, and System security requirements*

  These projects are required for NEM Entry, and seem likely to proceed in the reset period.

1.3 Other fixed development projects[(Page 54, Table 6.4)]

Insufficient detail has been provided to comment further on these projects. At face value, these appear to be necessary projects that are likely to proceed in the reset period. We have a specific query however, on whether Transend has included provision for installation of an optical fibre groundwire (OPGW) on the Sheffield-Farrell transmission line in the fixed, variable or renewal projects.

2 Development capital expenditure Variable projects

2.1 Variable projects to meet potential load growth[(Page 56, Table 6.6)]

- *Southwood wood-processing facility (new radial line and connection to Knights Road Substation), Mt Nelson 110/kV (new substation), Wynyard area upgrade (new substation), Hadspen transformer augmentation, Lindisfarne transformer augmentation and Additional Aurora feeder connections*

  While it is difficult to comment on these projects, as there is no information on their timing or probability available, it is very unclear as to whether any of these projects will proceed, or whether some could be more properly considered to be contestable projects, and hence are outside the revenue cap.

2.2 Variable projects to connect generation[(Page 57, Table 6.7)]

- *Tarraleah 220 kV connection to Liapootah Stage 1*

  Hydro Tasmania fully supports this project. However, we are unable to comment on the costs and timing underpinning the Application as this information has not been provided.

- *Tarraleah 220 kV connection to Liapootah Stage 2*

  It is not clear that this project is required, nor that it will proceed in the reset period.

- *Woolnorth wind (110kV connection bay)*

  Hydro Tasmania fully supports this project. However, we are unable to comment on the costs and timing underpinning the Application as this information has not been provided.

- *Robbins Island wind (110 kV connection bay)*

  As Hydro Tasmania is not the proponent for this project, it cannot comment on the likelihood of this project proceeding in the reset period.

- *Musselroe wind to Derby (110 kV connection bay)*

  Hydro Tasmania fully supports this project. However, we are unable to comment on the costs and timing underpinning the Application as this information has not been provided.

- *Heemskirk wind (220 kV connection bay)*

  Hydro Tasmania fully supports this project. However, we are unable to comment on the costs and timing underpinning the Application as this information has not been provided.

- *Brighton waste to energy (11 kV connection) and George Town waste to energy (22 kV connection)*

  We are unable to comment on the probability costs and timing as this information has not been provided.

- *Bell Bay connection for 350 MW (110 kV connection bay)*

  This project interacts with the need for reactive power at George Town – if this project were to proceed in the reset period, then there would be much less requirement for reactive support at George Town.

- *Southern gas-fired power station (110 kV connection bay)*

  It seems inconsistent to have the full Southern Augmentation reflected in the fixed Capex forecasts, and yet to also have a Southern gas-fired generator in the variable forecasts. As explained above, a Southern gas-fired generator would seem to undermine the case for large elements of the Southern Augmentation.

2.3 Variable shared network projects ***(Page 57, Table 6.7)***

- *Farrell-George Town 220kV (new line), Upgrade circuits to Smithton (north-west generation 65-136 MW) and Musselroe wind (increment to Norwood-Scottsdale-Derby line)*

  We are unable to comment on the probability, costs or timing underpinning the Application, as this information has not been provided.

- *Smithton to Sheffield 220 kV line (new line)*

  It is highly unlikely that this project will be required in the reset period.

- *Reactive Support George Town 70 MVAR Stage 1 and Reactive Support George Town 30 MVAR Stage 2*

  As noted above, the probability of these projects proceeding interacts with the likelihood of further expansion at Bell Bay, and this should be reflected in the probabilities. We are unable to comment on the costs and timing as this information has not been provided.

3 Renewal Expenditure(Page 61, Table 6.9)

As we noted in our meeting, the level of supporting information for the renewal expenditure was disappointing, particularly given that $194.9m capex is associated with this category. In particular, there is insufficient information in respect of the need case, the costs and timing of individual programmes.

There is also a general concern that some of these projects incorporate a significant element of uprating, rather than straightforward replacement. In its recent discussion paper on the regulatory test[1], the Commission noted:

> *"However, if a TNSP replaces an existing asset with one that simultaneously increases the capability of its network, the Commission is of the view that the part of the investment project that augments the network is subject to the regulatory test.*
>
> *However, where the augmentation is not assessed against the regulatory test the Commission will conduct a thorough review of the capital expenditure undertaken by the TNSP and will assess the prudency of the expenditure against a criteria similar to that set out in the regulatory test. Where it finds that the capital expenditure is not efficient the Commission has the ability to optimise the inefficient portion out of a TNSPs asset base. TNSPs who voluntarily assess replacement or refurbishment capital expenditure against the regulatory test are less likely to face this optimisation risk."*

A number of these projects would appear, *prima facie*, to provide increased capability, although they do not seem to have been subject to the regulatory test. While this would appear to be a business risk for Transend to assess, if it does decide to subject its projects to the regulatory test, this would seem to introduce the scope for procedural delays in its programmes.

3.1 Substation Capital Expenditure

- *220kV and 110kV circuit breaker replacement (1996-2010), High voltage switchgear (1997-2008), Supply power transformer (1996-ongoing), Network power transformer (1993-2008), Voltage transformer (VT) (1999-2010), Substation earthing system (1998-2010), Post insulators (1999-2009), Substation security and surveillance system (2000-2006), Substation building and site upgrades (1999-2010) and Protection systems/Control systems (2001-2010)*

  At first glance, these would appear to be worthwhile programmes. However, Table 6.9 begs more questions than it answers. Rather than detail concerns about each programme, it would be helpful if the following information were publicly available:

  - A history of each of these programmes, setting out the forecast expenditure at the OTTER determination, and the actual expenditure

[1] "Discussion paper - Review of the regulatory test", 5 February 2003, ACCC.

against that forecast. To the extent that the actual programme has not been representative of the forecast, discussion on the extent to which those lessons have been incorporated in the current forecasting process.

- Information on the detailed need cases for the individual replacements.
- Details of the specific replacement programmes, including the sites where renewal works are proposed. In some circumstances, this information would cause customers to make different decisions about their futures at these sites. For example, if renewal expenditure was forecast for a marginal production facility, it may well accelerate the decision to close that facility. Without this information in the public domain, imprudent capital expenditure may be undertaken. For example, we note the process adopted by the National Grid Company in the UK[2].

3.2 Transmission Lines

- *Substandard clearances on transmission lines (upgrading 1,250 identified substandard spans (1999-2004) and Transmission lines foundations and conductors (2001-2007)*

  We are unable to comment on these projects, as there is insufficient information provided. We understand however that these projects are nearing completion and on that basis would not expect these to be substantial costs.

- *Transmission line overhead earthing and communication system (1997-2012)*

  While little detail is provided for this project, there are concerns about its drivers. Currently, Transend leases some communications facilities from Hydro Tasmania. To the extent that this project is installing optical fibre ground wire ("OPGW") on the basis of replacing these leased communication facilities, the capital costs would not seem appropriate to include in the regulated income. There may be some cases in which the existing communications facilities will not be sufficient for future needs, however it seems unlikely that OPGW will be economic in situations where an earth wire is not already required for electricity system reasons.

  Further information on this project would offer the opportunity to allay these concerns.

[2] http://www.nationalgrid.com/uk/indinfo/charging/pdfs/CCM-M-04_decision_letter_no_veto.pdf

4 Non-network Capital Expenditure[(Page 64, Table 6.11)]

- *General Information Technology (IT), NEM Entry, Asset Management*

  In general, insufficient detail is provided to establish need cases for these projects.

As we hope we made clear in our meeting, we would be happy to assist the Commission and their consultants by providing any local knowledge on particular projects. However, the lack of information publicly available has made this very difficult.

The information we believe should be properly in the public domain is as follows:

- Detailed history of previous capex forecasts and actual programmes;
- Detailed forecasts of expenditure and timing for each significant project;
- Sufficient information on the need case of particular projects to assess, whether market participants would be affected by a particular project, or could have input on the need case;
- Information on the approvals status of the projects, with the RNPP, OTTER and the Transend Board; and
- For variable projects, the probability of the projects.

This information would greatly assist market participants in commenting meaningfully on the capex forecasts. In the meantime, we look forward to the publishing of your consultant's report in order that we may make further comments on the capex forecast and other issues.

I trust this has been of assistance. If you wish to discuss any aspect of this letter, please feel free to contact me on 03 6230 5485.

Yours sincerely,

Greg Jones
Manager, Power Delivery