Hydro Tasmania
the renewable energy business

11 October 2002

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

Delivered by e-mail to: electricity.group@accc.gov.au

Dear Mr Rawstron

RE: ELECTRANET TRANSMISSION REVENUE RE-SET -

With reference to the ACCC draft determination and the subsequent consultation forum on Friday 4 October 2002 in Adelaide, we would like to make the following submission for your consideration in relation to the provision of CAPEX relating to transmission infrastructure for windfarm developments on the Eyre Peninsula, as follows:

As part of Hydro Tasmania's renewable energy development program, we are actively pursuing the establishment of windfarms in SA, following the successful commissioning of our windfarm at Woolnorth in Tasmania earlier this year.

In co-operation with other windfarm developers (ANZ Infrastructure Services and Pacific Hydro), Hydro Tasmania is involved in identification and progression of common issues and objectives in relation to access of windfarms to new high voltage transmission infrastructure in the Eyre Peninsula area. This is being carried out under the terms of a Memorandum of Understanding sponsored by the Office of Economic Development in South Australia.

One of the common issues relates to the draft determination position of ACCC in relation to provision within ElectraNet's proposed CAPEX for development of essential transmission infrastructure required for connection of windfarms in the area.

ACCC, based on Meritec's advice, appears to have taken the view that there is no probability that any of the windfarm developments will proceed within the regulatory reset period. They have consequently not allowed any provisional amount in the revenue cap.

It is noted that ElectraNet's response to this view is that they will not proceed with funding of any infrastructure which has not been included in the revenue cap.

This is of some considerable concern to Hydro Tasmania (and the other wind developers) as this may result in new wind generation projects being significantly delayed or cancelled due to the lack of a suitable funding mechanism to facilitate connections to ElectraNet's network.

We would, therefore, ask that ACCC review their draft position and allow a suitable provision to be included in ElectraNet's CAPEX, as proposed by them.

- ***Probability of windfarms proceeding***

The probability of windfarm projects proceeding within the reset period is significantly higher than the virtual zero probability indicated by Meritec.

The west coast regions of the peninsula are noted for being windy and recent evaluations have shown the wind resource for power generation is regarded as world class. As a consequence, the prospect and probability of economic development of wind generation in these areas is high, particularly with the availability of renewable energy credits that can be earned by such generation under the Commonwealth Government's MRET legislation.

A number of experienced and well credentialed parties in the generation and financial sectors have formed the view that projects in the region have a very high probability of being bankable and are committing considerable physical and financial resources to their development.

In support of this view, the following is the current status of some windfarm developments in the area:

1. *Hydro Tasmania : Sheringa*

Hydro Tasmania's Development Application for the Sheringa Wind Farm on the Eyre Peninsula is well advanced and is expected to be lodged by the end of this month, with construction planned for 2004, pending a suitable connection.

A wind monitoring tower at Sheringa erected by Hydro Tasmania has been monitoring the wind capability on the site over last 15 months or so. We have completed rigorous environmental and cultural heritage studies on the proposed site, and consulted with landowners and aboriginal groups with favourable feedback.

Hydro Tasmania has commercial arrangements in place with Vestas (a prominent Danish Wind Turbine Manufacturer) to supply a large number of wind turbines to provide for the Sheringa project and other windfarm projects.

2 ANZ Infrastructure Services: Tungketta Hill

Ausker Pacific and Wind Power Investment Trust (WPIT), a vehicle managed by ANZ Infrastructure Services Ltd, have entered into a Shareholders Agreement in the project delivery vehicle for Tungketta Hill projects which have an expected capacity over three stages of 215MWs.

Development approval and a power purchase agreement term sheet are in place for the 50MW stage 1 of the project and work has commenced on further stage development approvals.

Two years of wind monitoring has been completed for Stages1 and 2, with 7 months completed for Stage 3. A WPIT information memorandum to raise an initial $50m is currently in the market.

- ***Benefits***

Access to the wind resource in South Australia is a key strategic issue of national importance. Access to these good wind sites will reduce the costs nationally of meeting our greenhouse targets.

The strategic importance of new generation and transmission infrastructure in the Eyre Peninsula region in South Australia is highlighted by the fact that there is a joint study being undertaken by the Office of Economic Development (OED), the Electricity Supply Industry Planning Council (ESIPC) and the Australian Greenhouse Office (AGO). The objective of this study is to understand the impacts of large scale wind farm developments on the energy market and networks and to determine the economic benefits to the region, the state and the country. We understand the study will be completed in the near future, and that its preliminary outcomes are positive in energy marketing and economic sense.

We would urge ACCC to consider the results of the study in its final determination.

Whilst the issues of cost and funding allocation for transmission infrastructure have been highlighted, the benefits of such an upgrade need to be included and valued appropriately.

The anticipated benefits of upgrading transmission infrastructure in the region include the following:

- Provision of firm transmission supply to an existing total load of 50MW;
- Offering customers a more reliable supply and better meeting of regulatory requirements in respect of quality of power supply;
- Provision of connection facilities for up to 400MW of wind power developments in the west coast region of the peninsula;
- Reduction in transmission losses;
- Improved voltage profile on the peninsula; and

- Removal of the need and cost to retain the Port Lincoln diesel power station

We understand that in the last few days, the South Australian government has announced a major desalination investment on the Eyre Peninsula, which will have significant impacts on the area load and network requirements.

Background and detailed comments on transmission development issues are provided in the attachment to this letter as supporting information.

- **Conclusion**

In conclusion, we ask that ACCC provide a suitable CAPEX provision within ElectraNet's Revenue Cap for the augmented Eyre Peninsula transmission to connect distributed generation in order to encourage appropriate infrastructure investment by ElectraNet. This will facilitate new generation and transmission infrastructure which will have benefits for South Australia and nationally.

If you have any queries, please contact me on 6230 5775 or Greg Jones on 6230 5485.

Yours sincerely

David Bowker

Manager, Market Development

Attachment

Background and Comments on Transmission Development on the Eyre Peninsula, South Australia.

Existing transmission arrangements

The Eyre Peninsula is supplied via a non-firm 132kV supply from Cultana. There is presently a single circuit from Cultana to Yadnarie, which divides into two further circuits, one to Port Lincoln and the other to Wudinna. It is understood that the total load on the Eyre Peninsula is in the order of 50MW.

Port Lincoln

Port Lincoln, located at the southern end of the peninsula is a major centre for fish farming and processing. Reliability of supply is critical for fish processing, with potential major economic of loss of production. It is understood that processors have or are considering installation of their own back up power supply arrangements.

Generation at Port Lincoln

There are currently two 25MW gas turbines at Port Lincoln that run on diesel. They can provide limited back up supply capability in the event of an outage of the 132kV supply from Cultana. Transmission outages may occur as required for maintenance requirements as well as forced outages.

The utilisation of the power station is relatively low with energy generated of the order of 1400MWh and 360MWh over the past two financial years, respectively, With marginal generation valued at $400/MWh, the marginal cost energy generated may be in the range of $150,000-600,000 per anum. As the power station is not fully utilised there are also significant standby and maintenance charges associated with keeping the power station available as required on an emergency short notice basis, and this cost to ElectraNet is understood to be in the order of $2.5M per annum.

Economic Development

There is little economic development at the centre and west of the peninsula apart from broad acre grazing of stock.

The west coast regions of the peninsula are noted for being windy. Recent evaluations have shown the wind resource for power generation is regarded as world class. As a consequence, the prospect and probability of economic development of wind generation in these areas is very high, particularly with the availability of renewable energy credits that can be earned by such generation under the Commonwealth Government's MRET legislation.

Wind Generation Investment

Wind generation developments are usually located in remote locations and the economics of developments at such sites includes provision of transmission connections to the transmission network.

It is understood that some 400MW of prospective wind generation projects have been identified on the Eyre Peninsula. On the basis of investment costs of the order of $1M/MW of capacity, wind generation projects would result in some $400M of investment in the area. Given the extent of investment it would be likely that wind turbine generator manufacturers may establish manufacturing/assembly facilities in the area.

Transmission Network Upgrading

Consideration has been give to upgrading the transmission network on the peninsula by the provision of 275kV connections from Cultana to a number of points on the peninsula. A number of alternative connections have been considered and supply points have variously included Port Lincoln, Uley, Yadnarie, Sheringa and Lock.

The advantages of upgrading the transmission network the area include:

- Provision of firm transmission supply to an existing total load of 50MW;
- Offering customers a more reliable supply and better meeting of regulatory requirements in respect of quality of power supply;
- Provision of connection facilities for up to 400MW of wind power developments in the west coast region of the peninsula;
- Reduction in transmission losses;
- Improved voltage profile on the peninsula; and
- Remove the need and cost to retain the Port Lincoln diesel power station

Other potential benefits include:

- Additional investment in the fish farming and processing industry on the peninsula on the basis of improved reliability of supply;
- Establishment of wind turbine generator manufacturing and assembly plants in the region; and
- A firm supply would provide a stimulus for investment in other areas of the peninsula, particularly associated with restitution of land degraded by salination.

Funding of transmission investments

The cost of provision of additional transmission network capacity will be offset by the following benefits:

- Reduced transmission losses;

- Reduced costs associated with maintaining voltage profile with the Code limits, i.e. network ancillary services or investment in reactive supply plant;
- Connection costs attributed to new wind turbine generators;
- Savings associated with the closure of the Port Lincoln diesel power station;
- Regional development and increased customer load.