VENCorp

3 March 2003

Mr Sebastian Roberts
Acting General Manager
Regulatory Affairs - Electricity
ACCC
GPO Box 520J
Melbourne 3001

Dear Sebastian

VENCorp's COMMENTS ON MURRAYLINK TRANSMISSION PARTNERSHIP'S APPLICATION FOR CONVERSION TO A PRESCRIBED SERVICE

The ACCC has invited submissions from interested parties on the Application lodged by Murraylink Transmission Partnership (MTP) for conversion of the Murraylink interconnector to a Prescribed Service. This letter sets out VENCorp's comments on MTP's Application.

In its description of the process and criteria to be applied in the ACCC's assessment, page 6 of MTP's Application states:

> *"This Application has been prepared on the basis of specific guidance re ceived from the Commission and its staff, relevant provisions of the Code, and corresponding Commission guidelines. Overall, MTP understands that the Commission will, and submits that it should, assess this Application in a manner that ensures a process and outcomes consistent with the process required to establish a new prescribed network service."*

VENCorp strongly agrees that the Application should be assessed in accordance with these principles. This letter identifies and briefly describes the issues that VENCorp considers warrant further careful consideration and resolution in the course of the ACCC's consideration of MTP's Application.

1. Estimating the Regulatory Asset Value for Murraylink

Under the method used by MTP to establish the Regulatory Asset Value for Murraylink, the gross market benefit[1] is determined, incremental operating costs of Murraylink are deducted, and the remaining amount is deemed to be the Regulatory Asset Value (RAV) for Murraylink, unless other alternative projects are identified that have a lower life cycle cost which would then become the RAV for Murraylink.

[1] The "gross market benefit" is the total incremental market benefit attributable to the Murraylink project before taking the total cost of Murraylink into account.

VENCorp

VENCorp is of the view that the approach proposed by MTP to establish the Regulatory Asset Value is reasonable and appears to be consistent with the Regulatory Test, in so far as a project valued in accordance with the approach would pass the Regulatory Test, provided all feasible options have been duly considered and appropriate assumptions have been made in relation to the relative costs and benefits of all options.

On this basis, the Regulatory Asset Value proposed in the MTP Application represents the absolute maximum value that could be attributed to the existing assets, without breaching the requirements of the Regulatory Test, and accepting at face value the validity of the assumptions made in MTP's analysis of market benefits, the definition of feasible alternatives, and the costs of those alternatives.

The relationship between the proposed Regulatory Asset Value for Murraylink and the gross market benefits attributed to Murraylink highlights the importance of ensuring that:

- all viable and cost-effective alternatives to the Murraylink project have been properly considered in the analysis; and
- there has been appropriate sensitivity testing of the assumptions underpinning the estimate of market benefits.

In this regard, it is noted that the independent reviews of Saha International Energy and PB Associates (which were commissioned by the ACCC) conclude that there is presently a high level of uncertainty surrounding fundamental issues such as:

- defining the transmission capability of Murraylink;
- estimating the value of gross market benefits attributable to Murraylink; and
- estimating the costs of all feasible alternatives.

In light of this uncertainty, both of the ACCC's independent consultants have recommended that further analyses be carried out to facilitate the establishment of robust estimates of the gross market benefit and Regulatory Asset Value of Murraylink. VENCorp is involved with MTP to accurately define the transmission capability of Murraylink with the proposed augmentations as suggested by PB Associates. This work will require a couple of weeks to finalise and we will provide a statement of our independent view of the capability at that time.

In this context, it is noted that Appendix D of MTP's Application indicates that MTP has estimated the gross market benefits of Murraylink to be in the range of $135.5 million to $225.6 million, with a "base scenario" gross market benefit of $214.2 million used to derive the proposed Regulatory Asset Value for Murraylink.

Given the wide range of possible outcomes, the proximity of the proposed Regulatory Asset Value to the upper limit of the range of outcomes, and the limited information available at present regarding the probabilities of those possible economic outcomes, there does appear to be a need for further careful analysis by the ACCC. It is understood that the ACCC and their consultants have requested further studies from the applicant and others. The aim of such analysis should be to ensure that the Regulatory

Asset Value is set an appropriate level, from the perspective of network users, given the uncertainty of outcomes involved, and the costs of the most cost-effective alternatives. VENCorp submits that the further analysis recommended by Saha International Energy and PB Associates (in their respective reports to the ACCC) should be expedited.

2. Defining the alternatives to Murraylink

The market benefits assessment undertaken by MTP appears to be based on an assumption that Murraylink and all the alternatives considered will provide an identical level of functionality to the market because this will then provide identical levels of benefit.

Based on this assumption, MTP's assessment then ranks each option by its total present-valued cost, with Murraylink (at its proposed Regulatory Asset Value) selected as the preferred option on the basis that its cost is:

- greater than the gross market benefit; and
- lower than any of the alternatives.

The MTP assessment does not appear to fully consider the likelihood that each alternative has different technical characteristics, and hence is likely to provide different levels of benefits. An analysis conducted strictly in accordance with the Regulatory Test would take into account the different characteristics (and hence benefits) associated with each option.

For instance, options that provide a lower level of supply reliability may be less costly to install (and hence have an "up-front" cost advantage against more reliable alternatives), but they will deliver higher on-going costs in the form of higher expected unserved energy, compared to higher reliability alternatives. The inclusion of these relative costs and benefits enables the direct comparison of options which differ in terms of their technical characteristics, outputs and service levels.

The assessment provided in the Application appears to ignore these differences. We therefore question MTP's assessment because:

- it limits the definition of services that must be provided by each "eligible" option to such a narrow extent that technically feasible options (which are potentially much cheaper than Murraylink) are excluded from the analysis; and
- it fails to properly account for the impact of differences in each option's technical characteristics on the net market benefits produced by each option.

As an example, the IOWG has previously undertaken work on feasible options for the upgrading of interconnection options between Victoria and South Australia. One of the options that could be used as an alternative project is the so called "Horsham A[2]" option, which is an interconnection between Horsham and Tailem Bend, which was assessed as having a transfer level of 220 MW at an estimated capital cost of $120M. It should be pointed out that this option has not been studied since about 1999 and while it was a valid alternative in 1999 this not necessarily now the case.

---

[2] The Horsham A option consists of a 275kV line between Horsham and Tailem Bend; 220kV lines between Moorabool and Ballarat, and Ballarat and Horsham; and station works at Moorabool, Ballarat, Horsham and Tailem Bend.

3. Estimated costs of Murraylink alternatives

MTP's Application identified six alternatives to Murraylink, with the estimated costs of the transmission-based alternatives appearing to be very high. Some of the reasons for these costs are discussed below:

Provision of similar services

One of the reasons for the high costs of alternatives appears to be that the MTP assessment seems to assume that in order to compare alternative options, they must each provide highly similar services.

As an example of one of the outcomes of this position, the AC transmission alternatives each include a phase shift transformer, which provides for control of the power flow over the interconnection. This ensures that the alternatives provide a similar service to that currently provided by Murraylink. Whereas it is important to have such control in an MNSP, we do not understand why it would be necessary to have such control in a regulated AC interconnector. This is a significant issue as the phase shift transformers account for nearly $20M of capital cost in alternatives 1 and 3.

Undergrounding Costs

As identified in the BRW report, the alternatives contain a significant amount of tactical undergrounding of transmission lines in environmentally or community sensitive areas. As noted in the SAHA report commissioned by the ACCC, the undergrounding costs add up to $68M to the costs of the alternative projects. This once again is a significant issue and the ACCC should assure itself that the amount of undergrounding is reasonable.

Finally, it is suggested that on the basis of cost estimates applied in similar economic studies, locally installed capacitor banks and gas-fired generation (at a cost of, say, $500 per kW) could reasonably be expected to provide a technically viable and cost-effective alternative to Murraylink at the proposed Regulatory Asset Value. VENCorp considers that this is an issue that is worthy of further careful examination during the additional analysis that has been recommended in the report of the ACCC's independent consultants.

4. Market benefits of Murraylink

The market benefits of Murraylink have been assessed with reference to a market-driven generation expansion sequence. The market-driven generation development scenario produces a higher level of expected unserved energy compared to the expected unserved energy associated with the Murraylink option. The reduced level of unserved energy is, in effect, counted as a benefit of the Murraylink project.

Note 6 of the Regulatory Test states:

> *"Modelled projects should be developed within market development scenarios using two approaches: 'least-cost market development' and 'market-driven market development'.*
>
> *(a) The least-cost market development approach includes modelled projects based on a least-cost planning approach akin to conventional central planning. The proposals to be included would be those where the net present value of benefits, such as fuel substitution and reliability increases, exceeds the costs.*

(b) *The market-driven market development approach mimics market processes by modelling spot price trends based on existing generation and demand and includes new generation developed on the same basis as would a private developer (where the net present value of the spot price revenue exceeds the net present value of generation costs). The forecasts of spot price tends should reflect a range of market outcomes, ranging from short run marginal cost bidding behaviour to simulations that approximate actual market bidding and prices, with power flows to be those most likely to occur under actual systems and market outcomes."*

VENCorp submits that in accordance with this particular requirement of the Regulatory Test, MTP's analysis of market benefits should also include consideration of the relative economic benefit of Murraylink alongside a "least-cost market development" sequence. The generation developments assumed under the "least-cost market development" scenario would be the least-cost sequence of new generation required to ensure maintenance of the Reliability Panel's maximum unserved energy criteria. That is, additional alternatives should be assessed which result in the level of unserved energy in the NEM equivalent to the maximum level of unserved energy set by the Reliability Panel.

It is expected that a "least-cost market development" sequence consistent with the Reliability Panel's maximum unserved energy criteria should provide a robust yardstick for measuring the relative costs and market benefits of the Murraylink project.

VENCorp believes it is important to undertake this additional analysis as the increased unserved energy in MTP's base case, due to only market-driven generation development, delivers a much higher level of unreliability than has been the standard over the last 30 years. The current mechanism in the National Electricity Code to address this is the Reserve Trader arrangements which explicitly allows for reliability-driven generation development where the target deterministic reserve level in each region is not maintained by market-driven entry. Although not tested yet, the existence of this mechanism, in conjunction with the Reliability Panel's maximum unserved energy levels, leads to the conclusion that this additional analysis should be undertaken.

5. Basis for recovery of regulated revenues through transmission prices

Page viii of the Application states that MTP proposes to recover its regulated revenue from the South Australian and Victorian regions on the basis of the geographic location of the Murraylink assets in each region. This is understood to be consistent with present arrangements for recovery of regulated interconnector costs under the National Electricity Code.

Under these arrangements, Victorian network users appear likely to bear a large proportion of the costs of Murraylink. VENCorp regards this as a major issue, because the allocation of costs under the Code's present provisions is unlikely to be consistent with the distribution of Murraylink's expected benefits[3].

In view of this, VENCorp submits that the ACCC's acceptance of MTP's Application should be conditional on:

- the implementation of appropriate inter-regional TUoS settlements between the regional coordinating TNSPs, to align the TUoS charges paid by users in each region more closely with the benefits that are expected to be provided by Murraylink; or

[3] It is apparent from MTP's application that the likely beneficiaries of Murraylink will be consumers in South Australia and generators in the New South Wales, Snowy and Victorian regions

VENCorp

- the implementation of reasonably foreseeable Code amendments (eg "beneficiary pays") that would provide a more equitable basis for allocation of Murraylink's costs.

Should you have any queries in relation to this submission, please contact VENCorp's Executive Manager Energy Infrastructure Strategy John Howarth (03) 8664 6565.

Yours sincerely

M. Zema

Matt Zema
Chief Executive Officer