

# Response to Draft Determination on the Tasmanian Derogations and Vesting Contract dated 18 July 2001

## Hydro Tasmania Submission

### 1. Introduction

- 1.1 The timely release of the ACCC's draft determination is a positive step towards Basslink and Tasmania's entry into the National Electricity Market (NEM).
- 1.2 Hydro Tasmania welcomes this opportunity to put forward its views. This is the first opportunity Hydro Tasmania has had to interface directly with the ACCC on these authorisations.
- 1.3 The conclusions on the vesting contract and the derogations are balanced outcomes which are good for Tasmania. They represent a sound basis for Tasmania to enter into the NEM as a single region.
- 1.4 This is an evolving market and the rules are changing day by day.
- 1.5 Tasmania's electricity industry is undergoing significant and complex structural changes which are moving forward at a rapid pace. Simultaneously, Tasmania's gas industry is developing. Hydro Tasmania would like to share its perspective on these developments based on the significant work it has undertaken, its role in supporting key projects such as Basslink and the important role it and these projects will play in the NEM.
- 1.6 Hydro Tasmania brings to the NEM a huge renewable and peaking resource previously denied to mainland Australia. This resource has always been there but historical State electricity structures meant it remained locked away. Now Basslink builds upon the competition reforms which the ACCC has overseen within the industry, enabling this resource to be unlocked and fully utilised.
- 1.7 Basslink also enables Tasmania's additional renewable potential to be brought into the NEM. There are benefits too for Tasmania because Basslink reduces risk for new on-island generators and new Tasmanian businesses. Basslink enables both mainland Australia and Tasmania to benefit from the synergies that are captured by linking a system reliant on high cost inflexible plant with a system comprising flexible hydro peaking plant.
- 1.8 The focus of this submission is on:
  - the competitive environment in which Hydro Tasmania (and the other Tasmanian generators) will operate following Basslink and NEM entry;
  - how market participants will manage risk and the role of IRRs in this environment;
  - the sell down of import IRRs;
  - how Basslink will operate and the economics underlying Basslink; and
  - the pro-competitive nature of Basslink and the contractual arrangements

which underpin Basslink.

## 2. **The Competitive Environment**

- 2.1 There will be real competition in Tasmania as part of the NEM. There will be a diverse mix of on-island generation (Hydro Tasmania, Duke Energy, the independent Bell Bay Power Company) as well as the 20 odd mainland generators also competing in Tasmania as part of the NEM. Basslink enables this to happen, by linking Tasmania to the mainland and by reducing the risk of entry for new on-island generators.
- 2.2 Basslink and NEM entry will bring significant structural changes to Tasmania. These changes will affect the market in a number of ways. From a temporal perspective, the flexibility of Basslink will allow demand and supply responses to drive a competitive environment in which different constraints will apply at different times (whether daily, seasonal, or otherwise). These competitive dynamics are not necessarily captured by taking a snapshot view of a particular trading interval or time of day. Basslink will alter geographical boundaries and reduce barriers to entry. In short, the NEM will be the market. The arrival of gas in Tasmania (due mid next year) will inevitably bring further changes to the evolving energy market and, from a functional perspective, will irrevocably alter the relationship between generators and retailers.
- 2.3 Importantly, the Basslink arrangements will bring new sources of electricity supply into Tasmania - electricity generated on-island as well as electricity generated on the mainland. What is important for effective competition is having a mix of generators with different profiles (not necessarily their size or market share). The developments in Tasmania will see a mix of on-island generators with different marginal costs and different behaviours, each competing for volume in a NEM setting.
- 2.4 Basslink is not itself a competitor to Tasmanian generators<sup>1</sup>. Rather, through interconnection (and the flexibility of the link to switch flow in response to market conditions) there will be competition between Tasmanian generators and mainland generators. Tasmania with its flexible mix of generation will provide vigorous competition to Victorian generators during times of Victorian peak demand where the supply/demand balance in Victoria is tight.
- 2.5 The key to the competitive environment is the volume risk<sup>2</sup> to which generators are exposed in NEM because this wholesale market does not compensate generators for their capacity. Generators must be dispatched by NEMMCO in order to be paid spot revenue and to be dispatched, they must bid their energy at a competitive price relative to the market.
- 2.6 What this means is that Tasmanian generators will be taking volume from Victorian generators every time Basslink exports during Victorian peak periods. The individual Victorian generators which will lose volume will be those bidding their energy at the highest prices. Conversely, when Basslink imports during Victorian off-peak periods, Victorian generators will gain additional volume at the expense of Tasmanian generators. Again, the individual Tasmanian generators which will lose volume will be those bidding their energy at the highest prices.
- 2.7 In addition to the competitive dynamics between Victoria and Tasmania, there will be

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<sup>1</sup> The National Electricity Code treatment of Market Network Service Providers (MNSPs) as if they were generators is a source of on-going confusion, which needs to be avoided in any competition analysis.

<sup>2</sup> Generators also face price risk but, for the reasons discussed in the balance of this submission, volume risk is far more important from a competition perspective.

further competitive dynamics within Tasmania with the diverse mix of on-island generation in Tasmania<sup>3</sup>. The separation of Bell Bay Power Station will happen upon NEM entry. The independent Bell Bay Power Company will own and operate the gas fired Unit A at Bell Bay. Duke Energy will have majority control and operation of the converted gas fired Unit B at Bell Bay. There are new biomass developments already underway at Brighton and Georgetown.

- 2.8 In addition, there will be other new entrant generators, using a range of fuel sources from wind to waste.
- 2.9 All this will not happen without Basslink.
- 2.10 These Tasmanian generators will compete for volume at all times. To give an example of this using the Tasmanian off-peak summer load as low as 900MW.<sup>4</sup> If Basslink imports at 300MW, then Victorian generators will gain 300MW of additional volume, leaving only 600MW between all Tasmanian generators. If the independent Bell Bay Power Company is dispatched for its full capacity and the Unit B joint venture has become operational at 365MW and is dispatched for its full capacity, then unless Hydro Tasmania is competitive this would leave less than 140MW of volume to be shared between Hydro Tasmania and the other new entrants.
- 2.11 This outcome has a commercial benefit for Hydro Tasmania because it has a limited hydro reserve which impacts upon its ability to take advantage of export opportunities during peak periods (as described in section 5 on the Basslink economics below). The competitive environment unlocks the existing potential benefit of Tasmania's hydro resource enabling Hydro Tasmania to realise the full benefit of its generating assets.

### 3. Risk management in NEM

- 3.1 All markets have financial aspects associated with physical flows. The key issue from a competition perspective is what role do these financial arrangements play - what constraints do they impose and to what extent do they alter physical transactions and the way the market operates. In the electricity industry, there is a specific role played by the financial arrangements that market participants typically enter into to increase revenue or minimise risk.
- 3.2 There is an important difference between being physically contracted and financially contracted. In a physical supply scenario, a producer which is "over contracted" needs to lift production. In a financial contracting scenario, a producer which is "over contracted" cannot reduce its exposure by lifting production - it must reduce its price.<sup>5</sup>

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<sup>3</sup> The net outcome of Basslink, the independent Bell Bay Power Company (separated from Hydro Tasmania) and the Duke Energy joint venture for Unit B at Bell Bay Power Station equates to what the Garlick Report acknowledged as effective competition (see page 48 of the Garlick Report). The Garlick Report did not stipulate that the only means of bringing effective competition would be to disaggregate Hydro Tasmania.

<sup>4</sup> 2000 Planning Statement Systems Controller Transend Networks (pages 86, 91, 93, 95).

<sup>5</sup> The following example illustrates this outcome. Say X has a production of 1,000MW per hour and is contracted with local customers for this full quantity of 1000MW.

In a physical supply scenario, X's contracts mean it is committed to delivering 1,000MW to local customers. If X now wants to commit to delivering 600MW under an export contract, it would need to lift production to produce 1,600MW or buy the shortfall from another producer.

In a financial contracting scenario, X is allocated a production volume by the market operator and receives a spot price for that quantity. The effect of X's contracts are to guarantee to local customers that X will reimburse them the difference between the spot price of the 1,000MW they buy and a fixed price (say \$10). If X is allocated a production volume of only 700MW, it will receive the spot price for only 700MW but it has guaranteed a price

- 3.3 The financial arrangements which generators enter into with retailers/customers (commonly referred to as "supply contracts") do not directly affect physical supply. Physical supply and payment of the spot price occurs by virtue of the NEM process. "Supply contracts" simply increase revenue or minimise risk at a cost.
- 3.4 A generator may contract to minimise the impact of potential volatility in spot prices (and to provide certain revenues to cover the fixed cost component of the generator). The benefit is that the generator will receive revenue above the spot price if the spot price is below the contracted price. The cost of contracting is that the generator will not receive the benefit of spot prices above the contracted price. The generator will still be exposed to volume risk, in that it will need to ensure that it is dispatched for at least its contracted volume or it will be liable to make contract payments without incoming spot price revenue out of which to make those payments.
- 3.5 Generators which contract with retailers/customers in another region face potential exposure to inter-regional price risk. In this context, there has been discussion regarding the inter-regional revenues (IRRs) from the operation of Basslink.
- 3.6 Inter-regional price risk will arise where there is price separation between Victoria and Tasmania. This could occur because Basslink is down (in which case there will be no IRRs). Price separation could also occur because Basslink is flowing at its full capacity and therefore constrained. A third scenario could be where the link is flowing at less than its full capacity but there is a transport bid (in which case the price difference will be the amount of the transport bid).
- 3.7 Inter-regional price differentials are influenced by a number of factors including not only transport bidding but also energy bidding in both the regions linked and whether or not the link is flowing at its maximum capacity. Because of this, it is impossible to predict whether any particular transport bid increases or decreases inter-regional price risk. In some instances it may have the effect of stabilising the price differential.
- 3.8 IRRs are not essential for inter-regional financial contracting (or competition). IRRs are one tool that may be utilised in relation to a specific type of price risk that generators face under contracts entered into with customers in another region. When the spot price in the generator's region is lower than the spot price in the customer's region, then the spot revenue received by the generator in its region may not be sufficient to cover the difference payments which the generator is required to make to the customer if the spot price in the customer's region is higher than the contract price. It is recognised that IRRs are an imperfect hedge against this risk. Prudent and effective risk management strategies will involve a range and mix of instruments and protective measures (a portfolio approach).
4. **Import IRR sell down**
- 4.1 There is no competition problem with Hydro Tasmania holding the import IRRs. Hydro Tasmania has bought them from Basslink Pty Ltd ("BPL") under the Basslink Services Agreement (the "BSA") in exchange for the facility fee.
- 4.2 Hydro Tasmania has agreed with the Government to implement its intended commercial sell-down of import IRRs as part of the Government's enhancements to the reforms.

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ceiling of \$10 on 1,000MW. If the spot price is \$12, this means that X will have an exposure of \$2 x 300 and a competitor will receive this windfall gain. X cannot fix its exposure by lifting production or buying from another producer. It must reduce its price so that it is allocated a greater volume.

- 4.3 Under the Government's sell-down framework, Hydro Tasmania still has the flexibility to offer interested parties either the import IRRs or packaged products, thus allowing firm products to be offered under commercial arrangements. These commercial arrangements may be for a long or short term and may be for any volume negotiated by the parties.
- 4.4 The Government's sell-down framework is a package designed to enhance the scope for inter-regional contracting, while maintaining the commerciality of the Basslink arrangements for Hydro Tasmania to preserve the essential commercial underpinning of the Basslink project. Without the important elements which preserve commerciality for Hydro Tasmania, the sell down framework would make it no longer viable for Hydro Tasmania to proceed with the project.

## 5. **The Basslink Economics**

- 5.1 Initially, the ability of Tasmania to import electricity will allow Hydro Tasmania to effectively reallocate water to be used more efficiently. But in a wider sense, the role of imports is to provide flexibility to allow the entry of new Tasmanian industry - a long-term safety net for Tasmania's presently constrained electricity supply.
- 5.2 Presently, Tasmania has a catch-22 situation. Potential new generators want to know that there will be sufficient load or they risk stranded assets due to overcapacity and potential new businesses want to know that there is sufficient generation capacity or they will establish themselves elsewhere. Basslink (offering the flexibility for net export or net import in response to the market) is the structural solution to overcome this catch-22 situation by minimising the risk of stranded assets and allowing new generators and new businesses to establish themselves in Tasmania.
- 5.3 The economics underlying the Basslink project require maximum flexibility with the operation of the link being driven by energy trading opportunities. Hydro Tasmania is ideally placed to compete against Victorian generators and improve the mix of generation in the NEM. The opportunity to do so depends upon the link operator (BPL) ensuring that the link is made available at its dynamic rating of 600MW per hour during Victorian peak periods. It is then up to Hydro Tasmania to ensure that its energy pricing is competitive enough to be dispatched during those periods.
- 5.4 In order to take advantage of these market trading opportunities, Hydro Tasmania needs to effectively reallocate water. It can do this during times when the link is importing or other on-island generation (such as Bell Bay) is meeting demand currently met by Hydro Tasmania. So in the example given in paragraph 2.10 above, the loss of volume to Hydro Tasmania during the off-peak period is a valuable opportunity for Hydro Tasmania to save water in order to take greater volume away from Victorian generators during peak times.
- 5.5 The flexibility under the BSA provides Hydro Tasmania with the opportunity to maximise trading revenue and save costs. As a consequence, water is not used to generate electricity at times when other options are available for Tasmania, but can play a role as a cheaper source of electricity for the mainland at other times.
- 5.6 The opportunities that this brings for Hydro Tasmania are also opportunities for new Tasmanian generators to enter the market. The increase in supply (initially by way of imports and then by new Tasmanian generators) provides opportunities for new Tasmanian businesses and enhances the development of retail competition.
- 5.7 The ability to make transport bids is an important part of the daily flexibility of Basslink which brings these benefits. For example, the Basslink economics assume that positive transport bids may be necessary to ensure that the link is available to export at its dynamic rating of 600MW during Victorian peak periods each day. It may also

be necessary to make positive transport bids for other reasons - technical (including environmental reasons) associated with the operation of the link. For example, this may be to prevent rapid and multiple switches in direction during the shoulder periods between the daily Victorian peak and off-peak periods or to reflect short run marginal costs incurred in operating the link.

- 5.8 The Government has included some restrictions on transport bidding as part of the enhancements to its reforms, designed to give the market greater certainty regarding the way in which Basslink will be bid during the transitional phase while preserving this important flexibility. Hydro Tasmania having the right to direct BPL to make positive transport bids or to request negative transport bids (as provided for under the BSA) is not a competition issue. This is simply part of the BSA package which enables Basslink to be built, as discussed in the next section. It is important that Basslink's flexibility is preserved by the legitimate use of transport bidding within the parameters of the Government's enhanced framework.

## 6. **The Basslink Arrangements**

- 6.1 The BSA is a commercial package which enables the link to be built without project risk and cost having to be borne directly by consumers. It is an economically efficient way of allocating project risk to those most able to bear it so that project risk and cost are reduced and the project becomes viable.
- 6.2 The parties to the BSA (Hydro Tasmania and BPL) fully briefed the ACCC on the BSA last year, resulting in the ACCC's letter of 15 November 2000 and the parties response of 20 December 2000 (both of which are publicly available on the ACCC website). The aim of this process was to identify any potential breaches of the Trade Practices Act which would have required the BSA to be submitted for authorisation and to provide the parties with regulatory certainty to proceed with the project. No breaches were found and the parties received comfort from the ACCC. The ACCC's "no action" letter of 15 November continues to apply.
- 6.3 The BSA is inherently pro-competitive because it enable Basslink to be built without any exclusivity of access or use and it enables Hydro Tasmania to position itself to meet peak demand, a role which makes best use of Hydro Tasmania's assets and which creates opportunities for new Tasmanian generators. It does not enable Hydro Tasmania to exclude any competitor from the market, nor does it give Hydro Tasmania any special power to control prices.
- 6.4 There is always an inherent tension under the MNSP model between those who would maximise revenue when the link is less available than the market wants (that is, a constrained link which will give rise to IRRs - one way for an MNSP to make revenue from an unregulated link) and those who would want the link to be physically available to its maximum capacity to derive trading revenue<sup>6</sup>. Under the BSA, this tension is removed because the effect of the BSA is to create open and free access to the link, which must be made available to transmit electricity between Tasmania and Victoria to its maximum capacity within its technical envelope.
- 6.5 Victorian generators (who will use Basslink) do not need to pay for access and have not needed to underpin the construction of Basslink - as such, they are enjoying a "free ride".

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<sup>6</sup> The ACCC has acknowledged that there is a recognised benefit in having increased interconnection (albeit subject to the MNSPs right to restrict availability) through an investment which has been constructed at the risk and cost of an entrepreneur rather than consumers.

## 7. **Conclusion**

7.1 The key conclusions of this submission are as follows:

- Basslink is pro-competitive.
- The NEM will be the market.
- There will be real competition in Tasmania as part of the NEM. It will not happen without Basslink.
- The BSA raises no competition issues - it is a practical way of enabling Basslink to be built.

7.2 The Government has set in train reforms which are irrevocably changing the market in which Hydro Tasmania operates. These changes bring significant new commercial opportunities for Hydro Tasmania, but they also bring significant new commercial risks for Hydro Tasmania. In order to take up these new opportunities and to successfully manage these new risks, Hydro Tasmania must accept the inevitable outcome of the Government's reforms and be competitive in its business operations. That is exactly what Hydro Tasmania is doing.

Hydro Tasmania

6 September 2001