

Submission to Electricity Supply Industry
Expert Panel Re: Issues Paper

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Summary of submissions on key issues

Hydro Tasmania welcomes this opportunity to respond to the Panel's Issue Paper in relation to the independent review of the Tasmanian electricity sector.

We are, as Australia's largest clean energy business, proud to be an integral part of the electricity industry in Tasmania, and to be one of Tasmania's participants in the National Electricity Market (NEM), providing energy security to the State and generating increased returns to our owners, the people of Tasmania.

Hydro Tasmania recognises the level of public concern about rising power prices which are occurring in all States and not just Tasmania. We are also well aware of the complex nature of our industry, which at times can be perplexing to all but those closely associated with how it works. When combined with the many challenges facing the industry itself, it is important to thoroughly investigate all aspects of the industry, separate fact from myth and provide a blueprint for a way forward.

Hydro Tasmania supports the Panel's drive to ensure the State's electricity industry is efficient and that Tasmanian consumers, whether they be industrial, business or residential, can have confidence in the sector.

Hydro Tasmania strongly supports the Panel's proposed electricity supply industry objective:

"To promote a safe, secure, reliable, efficient and sustainable electricity supply industry, capable of providing electricity services at efficient prices to Tasmanian Households and businesses, over the long term"

Hydro Tasmania's core submissions, which will be expanded on throughout this paper in response to the detailed questions set out in the Panel's Issues Paper, are the result of much work and consideration across the business.

They are as follows.

- The non-competitive segments of the electricity supply industry in Tasmania are where the real and significant cost increases are occurring, not the wholesale energy segment. These non-competitive segments include transmission, distribution and non-contestable retail. Hydro Tasmania believes that there has been a disproportionate focus by the Panel on the competitive segments of the market especially in relation to wholesale energy.
- Higher electricity prices experienced by Tasmania's non-contestable customers are primarily a result of:
 - real increases in network charges averaging 6-7% per annum over the period 2004/05 to 2010/11; and
 - the way in which the Tasmanian regulatory framework mandates that the wholesale component of their electricity prices is calculated.

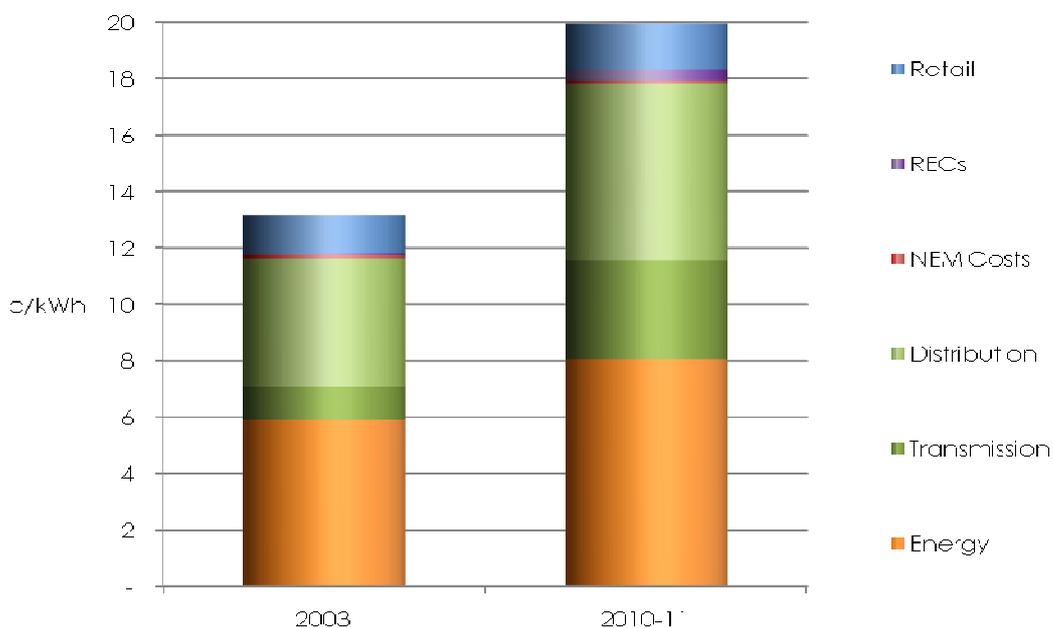
The term "wholesale component" in the context of non-contestable prices bears no relationship to the wholesale electricity prices in the NEM, which have been languishing at low levels for a sustained period of time.

- Both the spot and contract elements of the NEM wholesale market are operating efficiently and effectively in Tasmania.
- The facilitation of Full Retail Contestability (FRC) does not require regulatory intervention at the wholesale level, as long as new entrant retailers are able to access efficiently priced and appropriately structured wholesale products. Hydro Tasmania already has sufficient incentives to offer these products.
- The decision by Hydro Tasmania to enter into arrangements facilitating the development and operation of the Basslink interconnector has proven a sound commercial decision which has brought significant benefits, particularly increased system reliability and financial benefits, not only to Hydro Tasmania but also to all Tasmanian electricity users.
- Hydro Tasmania's provision of competitively priced contracts for major industrial customers has assisted in securing their operations in Tasmania for the future, for the benefit of all Tasmanians, with no element of cross subsidy.
- Hydro Tasmania notes the Panel's observation that compromising efficient electricity sector outcomes to achieve financial outcomes for the State Owned Energy Businesses (SOEBs) or taxpayers would not be in the community's best long-term interests. In this respect, Hydro Tasmania is able to offer a substantial future revenue stream to the Tasmanian community, as its owner. The maximisation of that revenue stream through Hydro Tasmania's efficient operation in the NEM should be the responsibility of a commercial board and management that oversees the business.

High electricity prices

The following figure is reproduced from page 11 of the Panel's Issues Paper, and shows changes in Aurora's Notional Maximum Revenue in \$2009/10

Figure 1: Notional Maximum Revenue for regulated tariff customers between 2003 & 2011



Concerns about high electricity prices have become evident in Tasmania, as they have throughout Australia. In Tasmania, residential and very small business customers are precluded by law from purchasing their electricity from any retailer other than Aurora. The price which these customers pay for their electricity is calculated in accordance with regulatory parameters set by law.

From the figure, it can be seen that the energy or "wholesale" component has increased by approximately one-third over the period from 2003 to 2010/11. In comparison, the networks component (transmission and distribution) has increased by over two-thirds during the same period. For comparison, CPI over the same period has been 20.9 percent.¹ . Furthermore, the so-called "wholesale" component, bears no relationship to the Tasmanian NEM region spot prices or associated hedge prices. Instead, the regulatory parameters require that this price be set at the cost of a portfolio of new (gas-fired) generation required to meet the customer load. This method of calculating costs results in a "wholesale" component of non-contestable customer pricing which bears no correlation to wholesale prices or to the production costs or overheads of Hydro Tasmania.

Wholesale market issues

The NEM is divided into five interconnected regions, with a spot price being set by the market for each region every half-hour. Basslink connected Tasmania's electricity infrastructure to the mainland. Since Basslink was commissioned, Hydro Tasmania has been competing with all NEM generators to have its output dispatched, meaning that Tasmania's wholesale electricity prices are set by competitive forces. Recent figures, reproduced in Section 3 of this paper, show that the Tasmanian region's spot prices for the last financial year were the second lowest in the NEM.

NEM participants, primarily generators and retailers, hedge their exposure to movements in spot prices by entering into derivative products. Subject to prudent risk management limits, Hydro Tasmania stands ready to contract with all comers against the Tasmanian regional reference price on an equitable basis.

In short, the wholesale energy market is delivering least cost and cost effective outcomes, evidenced by comparison of Tasmanian wholesale prices against prices in other NEM regions. Hydro Tasmania has given detailed information on cross-jurisdictional price benchmarks to the Panel which supports Hydro Tasmania's current spot market and hedge contract pricing.

Supporting the retail market

Retailers selling to Tasmanian customers, and major industrial customers in Tasmania, enter into hedge contracts with Hydro Tasmania to protect them against volatile spot prices and lock in retail margins.

Hydro Tasmania is proud of its role in providing hedges to these major industrial customers on terms which are ensuring the continuity of their businesses in Tasmania. These businesses compete in international markets, so Hydro Tasmania's contract terms need to be competitive, not just within the NEM, but on an international basis.

¹ Based on Hobart CPI figures.

Although the individual characteristics of any contract influence its terms, Hydro Tasmania offers pricing, and other terms and conditions, to retailers to support their supply to contestable customers using the same starting point as it uses for making offers to major industrial customers.

Because of the size of its current contestable load, Tasmania has not gained the attention of the major national electricity retailers, particularly with recent sales of government owned retail assets in Queensland and New South Wales taking centre stage. Now that those sale processes have been completed, Hydro Tasmania believes that these national retailers will start to take an interest in Tasmanian electricity consumers once the final tranche of Tasmanian customers becomes contestable. Without this final tranche of Tasmanian customers becoming contestable, Hydro Tasmania believes that NEM retailers have insufficient incentive to enter the Tasmanian jurisdiction.

In the absence of a large tranche of retail customer base being sold, a new entrant retailer needs to be able to enter any region or market gradually and organically. This requires access to a form of hedge contract that minimises the retailer's load acquisition risks (perhaps a load-following drawdown hedge facility). Hydro Tasmania is aware of such products being offered by generators elsewhere in the NEM and would be pleased to provide an equivalent in respect of the Tasmanian region. As Hydro Tasmania has no direct access to Tasmanian customers, other than the major industrial customers who participate at a wholesale derivative level, it has a commercial incentive to support an increase in the number of new entrant retailers serving Tasmanian customers.

Network prices

Network charges comprise a significant proportion of customers' electricity bills. As discussed in Section 5 below, the AER has recently indicated that the regulatory framework under which these prices are set needs to be overhauled to ensure it produces more efficient pricing outcomes.

Full retail contestability

Hydro Tasmania already supports new entrant retailers seeking to enter Tasmania, and continues to have discussions with retailers not presently in Tasmania to ascertain what Hydro Tasmania can do to assist those retailers should they wish to enter Tasmania. As Hydro Tasmania is statutorily barred from holding a Tasmanian retail licence, Hydro Tasmania has no incentive to do anything other than support new entrant retailers.

Key investments

Hydro Tasmania's decision to enter into arrangements to facilitate the development and operation of the Basslink interconnector was taken over a four year period (1999 - 2002), during which Hydro Tasmania undertook extensive commercial, operational and legal due diligence on the proposed arrangements. Some of the key reasons behind this decision included enabling Hydro Tasmania (and its Tasmanian stakeholders) to realise the full value of its unique assets and system peaking capability, to increase flexibility in the way in which Hydro Tasmania could use its water reserves and to facilitate market-based contract pricing for Tasmania's customers, including major industrial customers whose operations are critical to the broader Tasmanian economy.

The decision to enter into the Basslink arrangements has been proven to be a sound financial decision for Hydro Tasmania and the State. The last five years of Basslink's operations have resulted in a positive financial outcome for Hydro Tasmania, as a result of interregional trading opportunities, cost minimisation during the drought, increased ability to capture high inflows and a NEM market price for generation. Detailed figures provided to the Panel have substantiated this position.

Hydro Tasmania's decision to enter into the Basslink arrangements and other associated changes in the Tasmanian electricity supply industry have fundamentally changed the nature of Hydro Tasmania's business. In the 2010/11 financial year, only 29% of Hydro Tasmania's Tasmanian revenue related to the supply of Tasmania's non-contestable load, compared to 60% in the 2006/07 financial year. From 2009/10 to 2010/11, Hydro Tasmania's revenue from mainland operations more than doubled.

While the interconnector has contributed to "drought proofing" Tasmania's electricity supply, no "premiums" are paid by any sector of the Tasmanian population in relation to Basslink for this capability. Hydro Tasmania sets contract pricing by reference to Victorian contract prices, and does not tie any of its contract pricing to input costs, whether they be the cost of particular generating units or the cost of Basslink. The same generally applies to spot pricing as well, although this is occasionally subject to other factors such as transient market conditions. Hydro Tasmania has provided detailed information to the Panel in relation to Basslink to assist the Panel in understanding Hydro Tasmania's use of this complex infrastructure asset.

Governance

Hydro Tasmania is a market facing business. Unlike regulated entities, its revenue is derived from the market and is not related to its cost structure. Hydro Tasmania sells electricity at competitive prices, manages its exposure to merchant risk and manages its costs down to the minimum sustainable level. The Board and management of Hydro Tasmania are focused on running a commercial, competitive business with the highest standards of corporate governance.

Direct Response to Issue Paper Questions

The balance of this document will respond in detail to the specific issues on which the Panel has sought submissions in its June 2011 Issues Paper. Please note that the section headings, and issues, outlined in bold font below, track the headings and issues as they appear in the Issues Paper. Hydro Tasmania's submission has sought to address only those questions relevant to it. For completeness, we have listed those questions not addressed in Appendix One.

All abbreviations are explained in the glossary at the end of this submission.

1. Retail Sector

1.1 For contestable customers, how has the move to contestability impacted on electricity purchasing decisions, for example:

- **Changes in pricing levels, and how each part of the supply change is contributing to those changes.**
- **Pricing predictability.**
- **Contract duration.**
- **Spot market exposures.**

There are three distinct groupings of contestable customers in Tasmania, being:

- a group comprising the four major industrial customers located in Tasmania;
- Tranches 1 - 4 of Tasmanian contestable customers (excluding the major industrial customers referred to above); and
- Tranche 5a (which became contestable on 1 July 2011).

Hydro Tasmania's experience with the four major industrial customers located in Tasmania is that they seek to negotiate nationally and internationally competitive supply prices, and have approached Hydro Tasmania to support those prices with hedge contracts. Hydro Tasmania provides inter-regional hedge pricing on request, and has done so for each of the four major industrial customers. This has allowed each of these customers to benchmark Tasmanian hedge prices against mainland options. To date, to Hydro Tasmania's knowledge, these prices have only been used for analysis and negotiation as these customers have decided that Hydro Tasmania's Tasmanian region contract prices are acceptable in the context of the NEM and their broader businesses.

The major industrial customers have used these hedge arrangements to make plant investments that have improved the length of the economic and productive life of their

facilities. These customers engage separately with retailers and with Transend for competitive and regulated services respectively.

The major industrial customers also benefit from the ability to offer load interruption for Basslink. This load interruption is triggered simultaneously with the interruption of Basslink (when on import). This interruption service increases the import capability of Basslink from 144MW to 478MW.

The additional 334MW of import capability, when combined with the interregional revenue Hydro Tasmania receives from BPL under the BSA, allows Hydro Tasmania to source up to 334MW of supply to the major industrial customers at lower Victorian prices (e.g. off-peak) by replacing its own generation with imported electricity. Hydro Tasmania has incorporated the flexibility created by the physical and financial characteristics of its Basslink arrangements into its long term transactions with the major industrial customers.

Contestability has ensured that each customer can enter into tailored relationships that reflect their: consumption characteristics; plant flexibility to reduce demand; and, appetite to participate in the spot dispatch of the wholesale electricity market. These major industrial customers generally have in-house expertise and/or employ expert advisers to assist them optimise their supply arrangements. These arrangements are comparable with those achieved in other NEM jurisdictions. Some of these customers have spoken publicly about the relevance of these contractual arrangements to their long-term plans.

In 2007, one major industrial customer stated that its 10 year hedge contract with Hydro Tasmania was an excellent result for the customer.² In 2010, another major industrial customer stated that the successful conclusion of a hedge contract with Hydro Tasmania, to commence in 2015, ensured the customer's smelter would continue in Tasmania for its employees and contractors and their families.³

Tranches 1 - 4 of Tasmanian contestable customers have been able to contract for the supply of energy at lower prices as a result of the roll-out of contestability (which commenced for Tranche 1 in July 2006 and extended to Tranche 4 in July 2009). There have been some reported examples of customers entering into agreements with retailers other than Aurora on the basis of price, service and/or additional products. For example, Transend announced that from July 2010 it sourced approximately 10% of its energy from a new retailer because it received a "better offer".⁴ Hydro Tasmania also currently purchases approximately one-third of its energy requirements from a retailer other than Aurora, as it negotiated better arrangements with that third party. Similarly, in January 2011 the Tasmanian Government announced that it also had decided to contract with a retailer other than Aurora.

Hydro Tasmania has heard of various experiences for customers who have chosen spot price exposures, but notes that, despite the risk to the contrary, spot prices have been lower than contract prices in all regions of the NEM on average in most years. The process by which contestable customers obtain, compare and enter into competing energy offers is the same as used in other NEM states where brokers often assist customers in getting the best from the marketplace.

² Zinifex press release dated May 2007.

³ Rio Tinto Alcan press release dated December 2010.

⁴ From an article appearing in The Mercury on 9 February 2011.

Contestable contract prices in Tasmania are currently much lower than the new entrant prices used to calculate the wholesale component of non-contestable customer tariffs, so contestable customers see this benefit when moving from a regulated to a contestable contract. Data to support this proposition has been provided to the Panel.

Tranche 5a of contestable customers have not been contestable for very long, and outcomes for them are less observable, so Hydro Tasmania has no informed observations to make about their experiences.

1.2 The importance of diversity in managing wholesale energy risk and the extent to which it drives competitive behaviour in the retail sector.

Retailers in Tasmania have at least four theoretical options for managing wholesale energy risk in Tasmania: Hydro Tasmania; AETV; the use of inter-regional products to use Victorian (or other NEM region) prices; and purchasing from other planned generators in Tasmania.

Hydro Tasmania makes its hedge products available to any retailer or prospective retailer in Tasmania, and any potential retailer could choose to either build its own generation or contract with the developer of new generation in Tasmania. Hydro Tasmania is not aware of Aurora's (as owner of AETV) appetite for providing contracts to competing retailers.

The way in which Hydro Tasmania prices is always referable to Victorian prices, so the practical utility of inter-regional products or purchases from new entrant generators is limited. The attractiveness of either option will improve in particular circumstances (for example, a substantial increase in Victorian prices may make new generation more attractive), so the continued presence of these options is important for dynamic efficiency.

Hydro Tasmania does not consider that Tasmania lacks the diversity required for retailers to actively participate in Tasmania. The reasons are clear, the slice of customers that are contestable is small at about 3000GWh (including Tranche 5a) and the incumbent retailer has the advantage of having its own generation.

Hydro Tasmania has the commercial incentive to offer NEM competitive prices to any retailer in Tasmania, and has always been eager to do so.

1.3 The ability of a retailer to contract with parties that have generation located in other NEM regions.

Hydro Tasmania has attempted to encourage counterparties to use inter-regional products but the good availability and competitive pricing of Tasmanian hedges has led to no interest in inter-regional products. Hydro Tasmania has offered inter-regional swaps which have no basis risk in preference to the inter-regional revenues (IRRs), which provide a more risky option for counterparties. Detailed information has been provided to the Panel about inter-regional swaps and IRR products.

1.4 The potential barriers to effective retail competition in Tasmania, including:

1.4.1 The attractiveness of the retail market, particularly size and nature?

Without FRC, there is little point in the national retailers entering the Tasmanian retail market because of the relatively small number of currently contestable customers in this jurisdiction.

1.4.2 The extent to which the commercial structure of Aurora Energy as an integrated retail and distribution entity is a material barrier to new entry, such as through access to information from its distribution business or its ability to absorb thinner retail margins supported by the cash generated by its distribution business?

Functional and accounting ring-fencing guidelines have been developed by the Tasmanian Economic Regulator.

In February 2011, the AER requested certain changes to the Accounting Ring-fencing Guideline to facilitate transfer of the economic regulation of distribution services provided by Aurora from the Tasmanian Economic Regulator to the AER. However, this apart, the Functional Ring-fencing Guideline was developed in 2004 and does not appear to have been reviewed since.

Hydro Tasmania therefore invites the Panel to examine the effectiveness of the ring-fencing between Aurora's distribution and retail businesses, including the extent to which such ring-fencing is structurally enforced.

1.4.3 Do all retailers face similar risks or does size pose a greater degree of transparency in the wholesale market?

Hydro Tasmania considers that small retailers cannot take the same hedge risks as larger retailers. Small retailers, with smaller margins and balance sheets, need to be conservative, to obtain as close to perfect cover as they can get.

Various factors impact the magnitude of risks faced by retailers of differing sizes, including:

- Credit
 - Smaller retailers tend to be less 'credit worthy' than larger retailers. This limits a small retailer's ability to enter into counterparty agreements as a result of being viewed as a 'riskier' counterparty, thus leading to increased 'credit risk' premiums charged by counterparties on over-the-counter (OTC) transactions;
 - Smaller retailers also do not typically own generation. As such, they are likely to face increased AEMO prudential risks and thus require higher financial capital to remain a market participant. (Note: Smaller retailers typically undertake reallocation agreements with third party counterparties, however, this generally comes at a premium, thus increasing the risks they face as a result of decreased expected profitability);
 - Given the potential magnitude of 'variation margins' associated with dealing in electricity futures markets, a retailer's risk management strategy may be limited to OTC transactions as a means of managing its cash position;

- Customer segmentation and number of customers;
 - Large customers typically exhibit a different ‘usage profile’ from residential customers or small and medium businesses. As such, a retailer’s ‘volumetric risk’ is also characterised by the customer segment which it targets. As such, a ‘small retailer’ with a relatively ‘undiversified’ customer segmentation within its portfolio or ‘small load’ does not attain the benefits of ‘portfolio synergy’ (i.e. residential / small and medium business loads peak and trough at times different from large customers) benefits reaped by large retailers;
- Hedging strategy;
 - Provided retailers are not capital constrained (i.e. are able to fund the cost of hedging), the degree to which a retailer (whether small or large) chooses to hedge its exposure is a function of its risk appetite, risk policies, market views and other factors.

The degree of transparency in a wholesale market is a factor of the markets in which a retailer chooses to undertake its hedging. Market participants in the electricity and renewable energy certificate markets are faced with transacting in OTC or futures markets. Transactions undertaken in futures markets are undertaken via a clearing house and are exchange traded, thus assuring confidentiality and ‘limiting’ wholesale market transparency. OTC market trades do not feature the same mechanisms as futures markets. In essence, the relationship between ‘retailer size’ and ‘degree of transparency’ is not immediately evident but instead a function of markets in which a retailer chooses to participate, all things being equal.

1.5 In what ways has the regulatory framework delivered retail costs that are higher than would be delivered by a fully competitive retail market in Tasmania?

The price comparison information on OTTER’s website shows that electricity prices paid by Tasmanian residential and small business customers are roughly the Australian average for such prices.

As is usually the case with regulated contracts in NEM regions, Tasmanian non-contestable contracts prices are higher than those charged under contestable contracts. In Tasmanian, this is primarily because the Tasmanian regulatory framework has mandated that the current wholesale energy component of non-contestable customer contracts be calculated using long run marginal costs (or LRMC). The average annual spot prices in NEM regions are not close to LRMC, and Hydro Tasmania's experience of OTC hedges are also not close to LRMC.

1.6 What customer outcomes have influenced contestable customers switching retailers?

As mandated by the Tasmanian electricity legislation, no member of the Hydro Tasmania group retails electricity in mainland Tasmania. However, Hydro Tasmania's subsidiary Momentum retails electricity in all other member jurisdictions of the NEM.

Hydro Tasmania's experiences with Momentum are that customers are most interested in price, but that service (primarily billing issues and resolution of billing issues) is also a key driver. Customers also react to different customer interfaces, and different segments of customers will respond to different products. An effective retailer understands these segmentation issues, and tailors its marketing accordingly.

The behaviour of salespeople can be a factor in a customer's decision whether to switch. Switching can also be influenced by the bundling of electricity offers with other products such as gas. The inclusion of inducements such as discounts, giveaways and prizes alongside sustained marketing campaigns can cause switching which is just as much emotional as it is price driven.

2. Pricing

2.1 What examples of cross-subsidies do stakeholders think exist in the market and how do they arise?

There is no cross-subsidy in Hydro Tasmania's spot or contract prices. Specifically there is no cross-subsidy between the prices Hydro Tasmania offers to major industrial customers and other customers, and Hydro Tasmania does not price electricity to major industrial customers below cost. All contestable customer price offers are based on prevailing NEM market rates, and any variability in these rates affects Hydro Tasmania's profit, not the price offered to other customers.

This is not to say that all contracts are priced at the same level. Hydro Tasmania determines its contract pricing by reference to its Victorian sale opportunities, but price outcomes for any individual contract will vary depending on the individual characteristics of the contract. These may include load profile, contract term, alternative sale opportunities and other individual factors.

There is also no cross-subsidy in relation to Basslink. Hydro Tasmania sets contract pricing by reference to Victorian contract prices, and does not include any cost of Basslink in setting contract (or spot) prices.

3. Wholesale

3.1 What does the history of spot market prices demonstrate about the effectiveness of competition in the Tasmanian spot market?

The history of spot market prices in Tasmania shows that these prices sit at NEM levels. Sometimes they sit higher, sometimes they sit lower. Where they differ, it is a result of the passing supply and demand dynamics in various NEM regions.

Details of comparative pool prices by region have recently been published by the ACCC:⁵

Table 1: Volume weighted average spot electricity prices (\$ per megawatt hour)⁶

	TAS	QLD	NSW	VIC	SA
2009-10	30	37	52	42	82
2008-09	62	36	43	49	69
2007-08	57	58	44	51	101
2006-07	51	57	67	61	59
2005-06	59	31	43	36	44

Hydro Tasmania has calculated the following equivalent figures for 2010/11:

	TAS	QLD	NSW	VIC	SA
2010-11	31	34	43	29	42

These statistics clearly demonstrate that competition is effective at producing competitively priced outcomes in Tasmanian spot dispatch.

The NEM region which drives all Hydro Tasmania's Tasmanian pricing decisions is the Victorian region. Set out below is a table, which Hydro Tasmania included in its submissions on the Panel's discussion papers (updated for Q2 2011). Below the table is a description of the passing supply dynamics that impacted on these prices.

⁵ACCC's State of the Energy Market 2010

⁶ Volume weighted: The sum of the half hour spot price x regional demand divided by the sum of the half hour regional demand for the period

Table 2: Time weighted average annual spot price for the Tasmanian and Victorian regions by Quarter.⁷

State	Period	2006	2007	2008	2009	2010	2011
Vic	Q1	\$43.88	\$64.62	\$43.27	\$62.35	\$50.00	\$35.33
Tas		\$32.59	\$49.21	\$53.25	\$51.90	\$26.55	\$26.77
Vic	Q2	\$28.48	\$90.92	\$45.41	\$32.93	\$44.33	\$29.35
Tas		\$36.14	\$72.33	\$59.64	\$96.12	\$37.64	\$31.62
Vic	Q3	\$36.80	\$57.43	\$40.23	\$24.09	\$25.31	
Tas		\$40.58	\$62.64	\$43.08	\$22.91	\$38.78	
Vic	Q4	\$27.50	\$40.99	\$32.12	\$27.11	\$18.59	
Tas		\$36.37	\$43.23	\$43.10	\$30.40	\$20.58	
Vic	Annual	\$34.13	\$63.37	\$40.29	\$36.51	\$34.47	
Tas		\$36.44	\$56.91	\$49.79	\$50.24	\$30.92	

- Noticeable price separation between the regions (say 10%) occurs in 14 out of 22 quarters. These are split evenly between Victoria and Tasmania with both setting the higher price outcomes for the same number of instances.
- Tasmania and Victoria have some very different demand and supply characteristics.
- Victoria is summer peaking demand driven by hot weather (and so tends to separate upwards in Q1 (January to March)) while Tasmania is winter peaking demand driven by cold weather (so tends to separate upwards in Q2 and Q3).
- Victoria is predominantly thermal supply while Tasmania is predominantly hydro supply and so is exposed to upward price separation during periods of low inflows, particularly for medium sized storages and run of river generation.
- The high average spot price in Tasmania in the second quarter of 2009 is attributable to discrepancies in the risk management positions associated with either the late commissioning of AETV's CCGT plant or the evolving nature of the market.

However, it is important to understand that spot market prices do not provide the complete picture. Rather than looking at spot prices, reference should be made to the net outcome of the spot and contract positions.

For example, in respect of the high price events in June 2009, Aurora has stated it incurred \$8.6m in costs. Hydro Tasmania has separately calculated that its additional revenue from these events was in the order of \$3m. This means there is a \$5.6m differential which has been made by other parties (for example, Tasmanian major industrial customers which shed load may have been rewarded for doing so).

Further, in examining spot price outcomes, the Panel should not confuse temporary high spot prices caused by business decisions made by market participants with structural problems.

⁷ Time weighted: The sum of the half hour spot prices divided by the number of half hour spot prices

3.2 What aspects of the Tasmanian market architecture and/or underlying features create sustained and transparent competitive influences in the wholesale market?

Basslink means that Hydro Tasmania's marginal costs are almost always set by reference to the Victorian spot price. Basslink constraints are the exception, but while Tasmanian demand and supply are reasonably balanced this is at the margin.

3.3 Are there material barriers to entry arising from the wholesale sector architecture of the Tasmanian generation sector?

No. The existing wholesale energy market did not act as a barrier to entry when Alinta made its decision to enter the wholesale generation sector in Tasmania. The prime factor driving any new generation capacity is demand. In this respect, it should be noted that Tasmania's annual growth in electricity demand is considerably below that of the mainland member states of the NEM. Currently Tasmanian demand does not warrant building additional capacity.

3.4 When contract levels are high, i.e. a large proportion of the total load is subject to wholesale contracts, what is the material impact of a high-priced event in the spot market?

It is not as simple as looking at overall contract levels, rather one needs to look at the position of each participant. Individual participant cover may not match the participant's load, so there can be sector winners and losers.

3.5 Does Hydro Tasmania have the capacity to raise or lower spot prices based on its knowledge of the contract positions of its counter-parties and is there evidence that such a capacity has been exercised?

No. Hydro Tasmania only has an incentive or capacity based on knowledge of its own contract position. It does not know the position of contracts between other counterparties, such as between Aurora and Tasmania's major industrial customers, nor the potential physical response of others to any high price event.

3.6 How contestable, efficient and effective is the market for wholesale contracts in Tasmania?

This market is wholly contestable. There is no restriction on commercial dealings at the wholesale level.

The market is efficient. Hydro Tasmania understands that there is no public data, and data of any sort is relatively scarce as the low level of retail contestability means that wholesale contracts in respect of the Tasmanian region are thinly traded. However, the efficiency of the market can be established by the Panel by reviewing the prices at which those contracts are traded compared to equivalent prices in other NEM regions, particularly Victoria.

The market is effective because any retailer or wholesale customer who wishes to obtain a contract can secure one and the volume and profile of the contract will correspond to the retailer's or customer's request.

Since the wholesale contracts that are available in Tasmania are tailored to the requirements of the requesting counterparty, any intervention in the wholesale market would reduce contracting flexibility and would prejudice the market's dynamic efficiency.

Hydro Tasmania is conscious that an interested party has suggested there is a systemic wholesale issue. Our evidence in this submission shows that such a claim is unjustified. Indeed, no party has actually identified any specific example of such an issue or any inefficiency arising out of one.

3.7 How are wholesale contract prices, and other terms and conditions, struck?

As stated in Hydro Tasmania's undertaking on its website, Hydro Tasmania provides contract prices to approved counterparties on request. In addition, in order to ensure impartiality, at any given time, Hydro Tasmania would show the same underlying prices to different counterparties.

Hydro Tasmania has taken the following steps to enhance price contract transparency.

- Hydro Tasmania shows a standard schedule of prices to active Tasmanian retailers on a weekly basis.
- Hydro Tasmania has also provided this schedule to the Energy Users Association of Australia (EUAA) in the past as well as to electricity brokers on request.
- Hydro Tasmania has previously tried to promote liquidity of Tasmanian derivatives via the over the counter (OTC) broker market but did not attract any interest from other NEM participants. Hydro Tasmania remains keen to promote such price transparency through the OTC broker market and would be more than willing to respond to any price request through that market.

Hydro Tasmania uses standard International Swaps and Derivatives Associated (ISDA) documentation for its cap transactions in respect of the Tasmanian region. Hydro Tasmania's ISDA terms are based on the standard developed by the Australian Financial Markets Association (AFMA), noting minor variations to these terms are often agreed with individual counterparties at the time of negotiating the ISDA documentation, e.g. customised credit terms. These hedge contract terms and conditions are consistent with equivalent terms and conditions used by generators in other NEM jurisdictions where Hydro Tasmania is a purchaser, except that Hydro Tasmania's Tasmanian terms and conditions have reasonable jurisdiction-specific provisions in respect of swap contracts.

There are no jurisdiction-specific provisions used in respect of caps, as the risk profile offered to Hydro Tasmania by cap products does not necessitate any special terms.

Hydro Tasmania issues Standard Tasmanian Terms of Offer (**Tas Standard Terms**) to parties wishing to transact swap transactions with Hydro Tasmania in Tasmania. Two notable differences in Hydro Tasmania's Tas Standard Terms have been:

- Whole of Meter provision

The Tas Standard Terms contain provisions for whole of meter transactions which can be 'turned on' when a load following transaction is entered into. These include comprehensive clauses regarding provision of meter data information, as well as clauses for Permitted Load Variance provisions. Permitted Load Variance provisions are used to limit the volume of a transaction to within an agreed percentage of an expected average quantity over the term.

- Hydrological Risk provision

Hydro Tasmania has in the past included a clause for passing through some hydrological risk. This clause was introduced in response to the very low storage position experienced in 2008 when storage levels fell considerably below 20%.

Hydro Tasmania has recently reviewed and removed this clause. Hydro Tasmania's review determined that the clause is not currently required in order to manage hydrological risk. Hydro Tasmania will continue to regularly assess its hydrological position to monitor whether re-insertion of the clause is appropriate in the future.

3.8 What is the relative negotiating position of the parties and do contract terms broadly reflect contract terms, such as premiums relative to the spot market, available in other NEM regions?

Premiums are not relative to expected Tasmanian spot prices, as concern has been previously expressed about Hydro Tasmania's ability to influence these unilaterally. Hydro Tasmania's contract price offers in Tasmania will reflect prevailing contract prices in Victoria, which is Hydro Tasmania's alternative option for the sale of its output.

3.9 The validity and usefulness of a new entrant LRMC pricing indicator as a measure of the effectiveness of the wholesale energy market in Tasmania.

LRMC is just one of a set of indicators that need to be used to measure the effectiveness of the wholesale energy market in Tasmania. The other key indicators are short run marginal cost and Victorian price benchmarks which (except in circumstances of Basslink being constrained) represent the marginal supply cost.

Short run marginal cost is a half hourly, dispatch driven number. Long run marginal cost is calculated by reference to new entrant costs. Neither methodology reflects competitive market outcomes in the NEM, which fluctuate between (or occasionally even beyond) the two.

For Hydro Tasmania, opportunity cost is actually an intermediate measure, based on the marginal price Hydro Tasmania expects to receive for its contract sales over a one to three year period.

The one year lower limit for this determination is defined by the inflow cycle for Hydro Tasmania's storage system (other than the major inter-annual storages, Lake Gordon and Great Lake). The three year upper limit is less precise, but generally reflects the point where Hydro Tasmania's economic discount rate removes any financial incentive to store water in expectation of superior later returns.

This opportunity cost enables the articulation of principles, although not a mathematical formula, that can define reasonable expectations of short and medium term contract prices for Hydro Tasmania's Tasmanian sales.

These principles are:

- if Basslink is unconstrained, Hydro Tasmania's opportunity cost is the Victorian forward curve, adjusted for transport losses;
- Capacity products are as valuable in Tasmania as they are in Victoria on an annual basis, however, Tasmania is winter peaking whereas Victoria is summer peaking and contract pricing reflects this;
- Basslink constrains on import into Tasmania when Hydro Tasmania's water value exceeds the Victorian spot price. Based on a forecast Victorian price duration curve and forecast inflows, the extent of this constraint can be determined, and Hydro Tasmania's opportunity cost increases to the extent that it is compelled by the constraint to use additional water to back its sold contract position; and
- Basslink constrains on export from Tasmania when Hydro Tasmania's opportunity cost decreases to the extent that this causes Tasmanian prices not to rise to peaks seen in Victoria.

Hydro Tasmania notes that similar conclusions concerning price benchmarks can be found in Frontier Economics' report for the NEM Generators' Group in respect of a recent AEMC rule change consultation.⁸

3.10 Is there any evidence of latent market power in the Tasmanian wholesale market, and what are its consequences?

Market power is the ability to act unconstrained by market response (whether from competitors or otherwise). Hydro Tasmania does not have this power, whether latent or otherwise. Hydro Tasmania has provided extensive material to the Panel explaining the nature of the constraints on its operation. These constraints include:

- the threat of new entrant generation;
- the need to manage hydrological risk;
- the behaviour in spot dispatch of Victorian generators, other Tasmanian generators and major industrial customers;
- the delivery risk associated with being able to back a contract, including the risks associated with the availability of Basslink;
- the need to secure sustainable future revenues through longer term contracts.

Even if one assumes that latent market power might exist, there are many examples of oligopoly markets in Australia. Good regulatory practice dictates that regulators should only intervene when there is a benefit in doing so and no such benefit has been identified in the Panel's process.

⁸ This report can be found at www.aemc.gov.au/Electricity/Rule-changes/Open/Potential-Generator-Market-Power-in-the-NEM.

4. Wholesale Pricing for Non-Contestable Customers

4.1 The use and application of the existing form of LRM methodology in determining the wholesale energy allowance for non-contestable customers.

Hydro Tasmania believes that FRC with safeguards is a much superior solution to regulated pricing energy for small customers such as householders. It is interesting to note that for the customers in the first four tranches in which FRC was introduced to Tasmania, there are no safety net provisions and their experience appears to have been very positive. The lack of safety net provisions does not appear to have been a problem and Hydro Tasmania encourages the Panel to validate this observation with these customers.

The benefits of FRC are:

- customers can choose their retailer and trade-off price and volume depending on their service and brand preferences;
- it encourages innovation;
- the pricing is flexible and responds to market conditions whereas regulatory pricing is effectively set every three years based on assumptions at the beginning of the period; and
- it brings Tasmania into line with every other NEM jurisdiction.

If the Government chooses to not introduce complete FRC in Tasmania, the regulatory arrangements should not be prescriptive but should express the desired high level objective and leave the independent Regulator with the discretion to implement a suitable approach. This is also the best way for the Government's conflicting roles to be resolved and to enhance credibility in the independence of the Regulator.

The current approach of using the LRM methodology is theoretically sound if there is a potential requirement for new generation to supply customers, as the market price will theoretically rise to new entrant pricing (long run market cost (LRMC) of a new entrant). However, the current approach has failed to recognise that in the medium term there is no requirement for new generation in Tasmania. In addition, the Federal Government's renewable energy target for large-scale technologies such as wind (known as the LRET) may well cause additional new entry of wind in Tasmania. This means that the need for customers to pay the LRMC of a new entrant, while correct in the long term, is higher than is required by the market at the moment.

This could be resolved by changing the regulations to allow the Regulator to use market prices for non-contestable customers. This would, in our view, be a wasted opportunity and the implementation of FRC would be a far better approach with some additional measures to encourage retailers to come to Tasmania. One key measure would be to link the retail market arrangements to another state so that a retailer who already operates in that other state would have no additional costs in retailing in Tasmania.

5. Network Issues

5.1 The experiences of customers regarding the efficiency and effectiveness of Tasmania's network businesses in the delivery of capital programs.

Hydro Tasmania's experience, as a connection customer, is that NSPs' execution of projects is to an appropriate industry standard.

The delivery of connection assets is critical for the successful completion of Hydro Tasmania's new wind projects.

Overall, the costs of transmission service provision on a dedicated basis for a customer and the cost for connection are significant. In instances where the option is available to it (and so the service is effectively open to competition), Hydro Tasmania has found it is considerably cheaper to fund these costs itself, through ownership of the connection assets and contracting operational services, and seek to limit the involvement of the NSP in the provision of network asset services.

Due to the asset focus of NSPs (they are commercially rewarded for building new assets), Hydro Tasmania at times finds it difficult to convince NSPs to address low cost operational issues that impact on the operation of the transmission system.

5.2 The extent to which the NEM arrangements and/or jurisdictional changes have required additional network investment and/or direct customer costs to increase?

As is often noted, transmission and distribution charges together represent over 50% approximately of a customer's bill. In a recent television forum, a representative of Choice magazine states that the single biggest factor pushing up energy prices is infrastructure.⁹

The way in which Tasmanian transmission charges are set is regulated by the AER under the National Electricity Rules. The Chairman of the AER has recently stated that changes to the relevant provisions of the National Electricity Rules are necessary to promote efficient investment in and efficient operation and use of energy services for the long term interests of consumers of energy.¹⁰

Hydro Tasmania endorses these comments.

⁹ Interview on SBS' Insights Program "Power Play" between Jenny Brockie and Matt Levey of Choice magazine on 2 August 2011.

¹⁰ See, for example, Andrew Reeves' speech entitled "Finding the balance - the rules, prices and network investment" given at the EUAA's energy price and market update seminar.

6. Value Considerations of Major Investments

6.1 The extent to which the anticipated benefits of Basslink to Tasmanian electricity customers are being delivered and the value placed on those benefits by customers.

Hydro Tasmania has provided detailed information to the Panel:

- demonstrating the commercial viability of the Business Case for Basslink
- including a comprehensive analysis of the net value of Basslink during its initial five years of operation.

A significant portion of this information is of a commercially sensitive nature and cannot be provided publicly. However, the sources of value for Hydro Tasmania from Basslink include:

- providing opportunities through its flexible hydro generating system to trade price differences (“sell high and buy low”) between:
 - peak and off-peak;
 - seasonally; and
 - year to year;
- providing market based pricing to contestable customers;
- increasing water utilisation through reducing the amount of spill; and
- avoiding the cost of thermal support and load interruption to manage system security

Hydro Tasmania's calculated net benefit for Basslink fluctuates greatly year on year. The greatest annual net benefit has been in the order of \$100m, while the arrangement generated a relatively small loss in one year. Over the five years 2006/07 to 2010/11, the annual net benefit averages in excess of \$40m. The sources of value differ greatly from year to year, with the avoided cost featuring strongly during and immediately after the drought, while generation and sales opportunities have predominated more recently.

6.2 In the event that a carbon pricing mechanism delivers significant increase in the value of Hydro Tasmania, how ought that additional value be utilised?

Hydro Tasmania's leading status in the clean energy sector will give the business a natural competitive advantage under carbon pricing. This can be expected to result in benefits to Hydro Tasmania's business and to the State as a result of Hydro Tasmania's low emissions status. Increases in the value of Hydro Tasmania through improved asset values and revenues can provide the opportunity to strengthen and enhance Hydro Tasmania's role as Australia's leading producer of renewable energy and to continue to refurbish and modernise our ageing asset fleet.

Furthermore, increases in the value of the business will strengthen Hydro Tasmania's ability to pursue its strategic objectives: to grow the business; build its financial strength to reduce debt; and to increase returns to its owner, the State of Tasmania.

The Tasmanian Government determines the extent of Hydro Tasmania's annual return in the form of a dividend and any other costs and charges. In June, the Government lifted the rate of dividend from 50% to 70% of Hydro Tasmania's annual profit after tax. Overall, Hydro Tasmania is expected to return more than \$110 million to the Government in 2011/12. How any benefit from increased company dividends is passed on to the community is a matter for the Government and Hydro Tasmania will continue to work with its shareholder to ensure the State continues to benefit from almost 100 years of investment in renewable energy infrastructure.

7. Governance

7.1 What application of private sector continuous disclosure arrangements could be applied to the SOEBs, given community ownership of the businesses?

This is a general policy question relating to public scrutiny of all public affairs. The continuous disclosure arrangements contained in the Corporations Act are intended to ensure the orderly operation of capital markets (particularly the stock exchange) and consequently do not have direct theoretical application to government owned businesses since there is no market involvement in the application of capital.

As a Government owned integrated generator/retailer in the NEM, Hydro Tasmania is subject to far greater disclosure obligations and scrutiny, such as right to information powers and this Panel process, than its private sector counterparts. This provides Hydro Tasmania's private sector competitors with commercially sensitive information on the business which is not reciprocated through the ASX disclosure arrangements.

Furthermore, the corporate governance model applied to Hydro Tasmania, including Ministerial and Parliamentary oversight, is far more onerous than private sector entity. With regard to reporting, it is a measure of Hydro Tasmania's comprehensive disclosure arrangements that it is a previous winner and perennial finalists in the energy sector annual and sustainability reporting awards.

7.2 How stakeholders view the competing objectives commercial and broader Government policy objectives of SOEBs.

Hydro Tasmania gives primacy to commercial objectives, as it is required to do under the provisions of the Government Business Enterprises Act (Tas). These provisions result in a transparent balance of commercial and policy objectives. This is not to say that Hydro Tasmania operates without regard to broader societal issues. All major corporations need to balance financial objectives with their obligations to the society in which they operate. Hydro Tasmania does this through the application of its sustainability principles. Further details of Hydro Tasmania's sustainability principles and how these are applied can be found in Hydro Tasmania's annual reports.

Hydro Tasmania acknowledges that this question should be more appropriately answered by other stakeholders.

7.3 How stakeholders view the impact of competing objectives on SOEB performance and electricity market outcomes.

For Hydro Tasmania market outcomes determine financial performance since these outcomes drive Hydro Tasmania's revenue opportunity. Hydro Tasmania's performance is also subject to non-market risk factors. Most notable among these is the hydrological risk

Hydro Tasmania faces. A significant driver of Hydro Tasmania's commercial strategy is the mitigation of both market and non-market risks. Hydro Tasmania firmly believes that as a market-facing entity it is better placed to manage these risks than any of its stakeholders, as it is impossible and unwieldy to replicate the sophisticated management capability needed to manage a merchant risk business operating in the NEM.

7.4 Comments on the Panel's view that compromising efficient electricity sector outcomes to achieve financial outcomes for the SOEBs or the taxpayers would not be in the community's best long-term interest.

Hydro Tasmania has noted the Panel's observation that compromising efficient electricity sector outcomes to achieve financial outcomes for the SOEBs or taxpayers would not be in the community's best long-term interests. If government or the community wishes to achieve some policy objective which impacts on the energy market, this should be done transparently so that the efficiency and effectiveness of the market are not compromised

7.5 The role of Shareholder Ministers in driving business performance – both financial and operational.

(refer to answer below)

7.6 The role of Shareholder Ministers in driving business efficiencies to improve electricity prices for Tasmanian customers.

Hydro Tasmania sees the role of Shareholder Ministers as approving the SOEB's business charter and business plan. It is management's responsibility to manage financial and operational performance in line with the expectations of the Shareholder Ministers. The Shareholder Ministers also have a role in holding the management of the SOEBs to account for the achievement of the plan.

This model is consistent with current practice. It allocates responsibilities to those best placed to manage them and is broadly in line with the role of shareholders and boards / business management in the private sector. It is the role of the Boards of the SOEBs, on behalf of the Shareholder Ministers to drive business performance.

7.7 How the Tasmanian community, as the ultimate owner of the SOEBs:

7.7.1 Views the additional risk associated with SOEBs expansion into non core activities and/or operations outside Tasmania.

Hydro Tasmania's view is that not all operations outside Tasmania are non-core or result in additional risk. Hydro Tasmania is exposed to the following risks in Tasmania, which are largely uncontrollable:

- a significant reduction in revenue due to a major industrial customer leaving Tasmania;
- market dynamics of the Tasmanian region – if Hydro Tasmania only operated in Tasmania it would be exposed to significant market concentration risk; and

- hydrology.

The connection of Basslink was Hydro Tasmania's first major investment outside Tasmania. Basslink was used extensively as a source of supply during the drought period (reducing hydrological risk) and it gives Hydro Tasmania access to the Victorian region, providing Hydro Tasmania an alternative market into which to sell its energy and reducing market concentration risk faced by Hydro Tasmania.

Momentum, a mainland retailer acquired by Hydro Tasmania and subsequently built up into a highly successful business, is the critical element in managing Hydro Tasmania's risk exposure. Momentum allows Hydro Tasmania to further diversify its revenue sources, as it now can derive revenue from selling directly to retail customers and is no longer reliant solely on the wholesale market for revenue. Hydro Tasmania needs to carefully manage the risks around Momentum, including ensuring Momentum's retail load is backed appropriately. However, these risks are similar to those faced by all privately owned energy companies and have been shown to be largely controllable, unlike the largely uncontrollable risks (especially hydrology) faced by Hydro Tasmania in Tasmania. Effectively we have switched uncontrollable risks in Tasmania for risks which are capable of being managed in Tasmania.

Upon disaggregation, Hydro Tasmania acquired responsibility for the consulting business of the former fully integrated entity. This business is run on a stand-alone competitive basis in accordance with the commercial principles of any professional consultancy. The consulting business enables Hydro Tasmania to leverage off its world renowned hydro power and water resource management capabilities at a time when the world is looking to clean-tech solutions for both energy and water resources.

7.7.2 Views the trade-off between capital growth and the SOEBs and the return of dividends.

The shareholder does not have a clear-cut choice between capital growth and the return of dividends.

Hydro Tasmania operates to maximize the return of dividends to the Tasmanian people over time. It does this by delivering dividends for the State Budget in the current year, while also delivering projects that will maintain and enhance the stream of dividends in the long term.

7.8 The broad financial performance of the SOEB portfolio – does the community receive a reasonable return for its investment in the portfolio, and what could be done to improve it?

Hydro Tasmania acknowledges that its returns to Government over the period since disaggregation have not met commercial benchmarks when assessed against its balance sheet equity (retained earnings). Any assessment of Hydro Tasmania's financial performance needs to take into account the nature of the business that was established at disaggregation.

Hydro Tasmania's electricity generation capability is based upon a portfolio of integrated generation plant that is strategically located at optimum water catchment points on mainland Tasmania. These assets are by their nature highly capital intensive and on a megawatt installed basis far more expensive than thermal plant. Their advantage, however,

lies in their ability to access a renewable source of energy that is relatively low cost on an annual basis but subject to significant volatility through hydrological risk. Unfortunately, the price of electricity in the NEM wholesale market is dictated by the predominance of low cost brown coal. Therefore, Hydro Tasmania effectively enjoys the same electricity price as Hazelwood and receives no value for the fact that its production results in zero emissions while Hazelwood produces 1.3 tonnes of CO2 for each MWh produced. It is therefore impossible within the current non-carbon price electricity market for Hydro Tasmania to earn a sustainable return. Clearly, the business is looking to the introduction of a carbon price to remedy this state of affairs.

In the interim, Hydro Tasmania has placed considerable emphasis on reducing and maintaining its operating cost base so that it would attain cash operating cost levels consistent with best commercial practice. This solid foundation will ensure that with the inclusion of a carbon price in the NEM Hydro Tasmania will be able to produce a properly reflective return on its capital investment.

In 1998, on disaggregation of the vertically integrated Hydro-Electric Corporation into the generation, transmission, distribution and retail businesses, Hydro Tasmania carried a number of residual liabilities (not least among them high debt levels as shown in Table 3 and a disproportionate unfunded Retirement Benefits Fund liability) which saw it only break even on disaggregation. The business was then called upon to provide special dividends for a period. Hydro Tasmania did benefit from some reallocation of capital within the SOEBs but is still in the process of trading out of the financial impact of the original residual liabilities and the effect of maintaining security of supply during the drought. The corporate plan of the business is focussed on attaining and maintaining a level of debt consistent with BBB status in credit rating terms. This goal demonstrates strong financial management and the need for Hydro Tasmania to keep overall debt levels under tight control.

Table 3: 1998 Debt allocation and 2010 debt levels for electricity businesses (\$M)

	1998 debt allocation	30 June 2010 debt levels
Hydro Tasmania	\$1013	\$870
Aurora Energy	\$349.5	\$992
Transend Networks	Nil	\$513
Total	\$1362.5	\$2375

Glossary

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AETV	Aurora Energy Tamar Valley Pty Ltd
AFMA	Australian Financial Markets Association
BPL	Basslink Pty Ltd
BSA	Basslink Services Agreement
CCGT	Combined Cycle Gas Turbine
CPI	Consumer Price Index
EUAA	Energy Users Association of Australia
ESI Act	Electricity Supply Industry Act 1995 (Tas)
FCAS	Frequency Control Ancillary Service
FRC	Full Retail Contestability
GW	Gigawatt
GWh	Gigawatt hour – a consumption of 1 GW for 1 hour
ISDA	International Swaps & Derivatives Association
LRET	Large-scale Renewable Energy Target
LRMC	Long Run Marginal Cost
Momentum	Momentum Energy Pty Ltd
MW	Megawatts
NEM	National Electricity Market
NER	National Electricity Rules
NMR	Notional Maximum Revenue
NSP	Network service provider
OTC	Over the Counter
OTTER	Office of the Tasmanian Economic Regulator (formerly Electricity Regulator)
SOEB	State Owned Energy Business
Swap	A transaction that swaps floating for fixed price and vice versa.
TVPS	Tamar Valley Power Station

Appendix One: Questions not addressed in this response

1. Retail Sector

- What have been the implications of these changes for business decisions?
- The effectiveness of retail participation and competition for larger commercial and industrial customers (Tranche 1 and 2) – what level of competition exists between the 5 licensed retailers and how has it changed since contestability has been introduced?
- The effectiveness of retail competition for smaller commercial, industrial and business customers with the two existing active retailers – have contestable customers observed strong competition on a consistent basis?
- The potential barriers to effective retail competition in Tasmania, including:
 - The extent to which Aurora Energy, as the incumbent retailer, has superior market information on eligible customers as contestability rolls out?
 - The impact of the recent vertical integration of Aurora Energy as a ‘gentailer’ – has this had an impact on the perceptions of its competitive position in Tasmania?
 - Is there a difference in the cost to serve Tasmanian customers in relation to customers in other NEM jurisdictions?
 - What is the relative importance of wholesale market issues compared with other barriers to entry?
- The experience of contestable customers during the roll-out of retail contestability and outcomes of alternate retail options. What changes have customers observed?
- The experience of contestable customers during the roll out of retail contestability and outcomes of alternate retail options. What changes have customers observed?
- What customer outcomes have influenced contestable customers switching retailers?
- Stakeholders’ views on the proposition that weighting that should be placed on potential value implications on Aurora Energy’s retail business from the introduction of FRC, rather than on outcomes for customers.
- How can the ability of customers to participate in the market be improved through the way information is provided?
- Whether it is the role of the Government or the market to provide information for customers to make informed electricity purchasing decisions?
- What forms of improved customer-related information could increase the overall effectiveness of retail contestability (e.g. Understanding of network prices, the ability to compare offers)?

2. Pricing

- Whether it is the principle of a fixed daily charge or its level that is the major issue.
- The impact of the current tariff structure on demand management, energy efficiency and affordability.

3. Wholesale

- How transparent is the underlying position of wholesale market participants in Tasmania, and does this pose a material barrier to entry in either generation or retailing?
- What is nature and extent of differences in wholesale contract in Tasmania, and what drives those differences?
- Does a high level of contract cover represent an optimal risk management position for market participants, and what is the impact of higher insurance levels on end customer prices, noting that insurance is not costless?
- How have the application of the NEM rules in Tasmanian created value opportunities? For example:
 - In shaping the bid stack – where along the supply curve is competition strongest and weakest?
 - How can non-scheduled generation materially shift supply and demand balance and therefore move prices?
- Are there other aspects of the ‘standard’ NEM model that appear inconsistent with the underlying market architecture in the Tasmanian region and evidence to support this view?
- Is there a need for something to support the standard NEM arrangements to deal with specific Tasmanian circumstances?
- Stakeholder views on whether latent market power may be exercised at some point in the future.

4. Wholesale Pricing for Non-Contestable Customers

- How prescriptive should the regulatory arrangements for determining prices be?
- What is the appropriate role of Government in establishing the framework for the regulator, given it multiple interests in the sector?
- How efficient and effective are the current regulatory arrangements in determining efficient energy price outcomes for non-contestable customers?
- What alternative arrangements for setting the energy supply cost allowance might be more appropriate than those currently specified in the current Price Control Regulations?

5. Network Issues

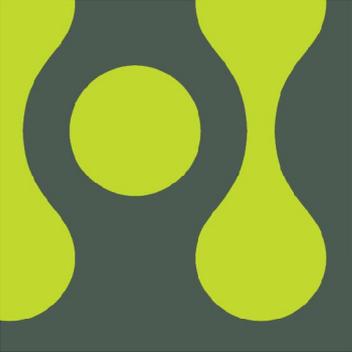
- What can be done to reduce network costs to customers while maintaining appropriate reliability and safety standards?
- The consequences, including costs, for the transmission network arising from physical interconnection and how these costs are distributed to customers?
- How are customers benefiting through the current NEM arrangements by comparison with previous arrangements?
- When reliability standards are being proposed, how are pricing consequences considered?
- Do customers recognise changes in service quality have pricing implications and how could the link between prices and standards be made more transparent?
- The affordability for Tasmanian customers of the improved reliability standards imposed by the '101 communities' policy.

6. Value Considerations of Major Investments

- If a primary role of the TVPS is hydrological risk management, how should the full costs of the TVPS be funded over time?
- Stakeholder views on the trade off between the preservation of value of the TVPS asset and non-contestable customer prices.

7. Governance

- What could be done to improve transparency and accountability of decision making in the future, while recognising the need for appropriate protection of commercial interests?
- How stakeholders view the competing objectives commercial and broader Government policy objectives of SOEBs.



Submission to Electricity Supply Industry
Expert Panel Re: Issues Paper

Date: August 2011

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Summary of submissions on key issues

Hydro Tasmania welcomes this opportunity to respond to the Panel's Issue Paper in relation to the independent review of the Tasmanian electricity sector.

We are, as Australia's largest clean energy business, proud to be an integral part of the electricity industry in Tasmania, and to be one of Tasmania's participants in the National Electricity Market (NEM), providing energy security to the State and generating increased returns to our owners, the people of Tasmania.

Hydro Tasmania recognises the level of public concern about rising power prices which are occurring in all States and not just Tasmania. We are also well aware of the complex nature of our industry, which at times can be perplexing to all but those closely associated with how it works. When combined with the many challenges facing the industry itself, it is important to thoroughly investigate all aspects of the industry, separate fact from myth and provide a blueprint for a way forward.

Hydro Tasmania supports the Panel's drive to ensure the State's electricity industry is efficient and that Tasmanian consumers, whether they be industrial, business or residential, can have confidence in the sector.

Hydro Tasmania strongly supports the Panel's proposed electricity supply industry objective:

"To promote a safe, secure, reliable, efficient and sustainable electricity supply industry, capable of providing electricity services at efficient prices to Tasmanian Households and businesses, over the long term"

Hydro Tasmania's core submissions, which will be expanded on throughout this paper in response to the detailed questions set out in the Panel's Issues Paper, are the result of much work and consideration across the business.

They are as follows.

- The non-competitive segments of the electricity supply industry in Tasmania are where the real and significant cost increases are occurring, not the wholesale energy segment. These non-competitive segments include transmission, distribution and non-contestable retail. Hydro Tasmania believes that there has been a disproportionate focus by the Panel on the competitive segments of the market especially in relation to wholesale energy.
- Higher electricity prices experienced by Tasmania's non-contestable customers are primarily a result of:
 - real increases in network charges averaging 6-7% per annum over the period 2004/05 to 2010/11; and
 - the way in which the Tasmanian regulatory framework mandates that the wholesale component of their electricity prices is calculated.

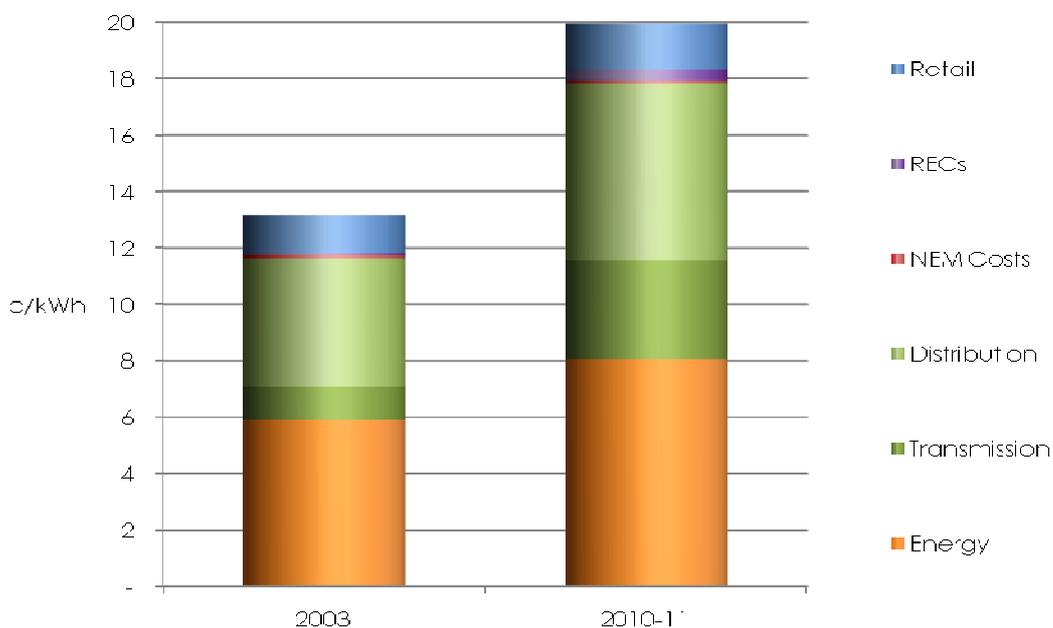
The term "wholesale component" in the context of non-contestable prices bears no relationship to the wholesale electricity prices in the NEM, which have been languishing at low levels for a sustained period of time.

- Both the spot and contract elements of the NEM wholesale market are operating efficiently and effectively in Tasmania.
- The facilitation of Full Retail Contestability (FRC) does not require regulatory intervention at the wholesale level, as long as new entrant retailers are able to access efficiently priced and appropriately structured wholesale products. Hydro Tasmania already has sufficient incentives to offer these products.
- The decision by Hydro Tasmania to enter into arrangements facilitating the development and operation of the Basslink interconnector has proven a sound commercial decision which has brought significant benefits, particularly increased system reliability and financial benefits, not only to Hydro Tasmania but also to all Tasmanian electricity users.
- Hydro Tasmania's provision of competitively priced contracts for major industrial customers has assisted in securing their operations in Tasmania for the future, for the benefit of all Tasmanians, with no element of cross subsidy.
- Hydro Tasmania notes the Panel's observation that compromising efficient electricity sector outcomes to achieve financial outcomes for the State Owned Energy Businesses (SOEBs) or taxpayers would not be in the community's best long-term interests. In this respect, Hydro Tasmania is able to offer a substantial future revenue stream to the Tasmanian community, as its owner. The maximisation of that revenue stream through Hydro Tasmania's efficient operation in the NEM should be the responsibility of a commercial board and management that oversees the business.

High electricity prices

The following figure is reproduced from page 11 of the Panel's Issues Paper, and shows changes in Aurora's Notional Maximum Revenue in \$2009/10

Figure 1: Notional Maximum Revenue for regulated tariff customers between 2003 & 2011



Concerns about high electricity prices have become evident in Tasmania, as they have throughout Australia. In Tasmania, residential and very small business customers are precluded by law from purchasing their electricity from any retailer other than Aurora. The price which these customers pay for their electricity is calculated in accordance with regulatory parameters set by law.

From the figure, it can be seen that the energy or "wholesale" component has increased by approximately one-third over the period from 2003 to 2010/11. In comparison, the networks component (transmission and distribution) has increased by over two-thirds during the same period. For comparison, CPI over the same period has been 20.9 percent.¹ . Furthermore, the so-called "wholesale" component, bears no relationship to the Tasmanian NEM region spot prices or associated hedge prices. Instead, the regulatory parameters require that this price be set at the cost of a portfolio of new (gas-fired) generation required to meet the customer load. This method of calculating costs results in a "wholesale" component of non-contestable customer pricing which bears no correlation to wholesale prices or to the production costs or overheads of Hydro Tasmania.

Wholesale market issues

The NEM is divided into five interconnected regions, with a spot price being set by the market for each region every half-hour. Basslink connected Tasmania's electricity infrastructure to the mainland. Since Basslink was commissioned, Hydro Tasmania has been competing with all NEM generators to have its output dispatched, meaning that Tasmania's wholesale electricity prices are set by competitive forces. Recent figures, reproduced in Section 3 of this paper, show that the Tasmanian region's spot prices for the last financial year were the second lowest in the NEM.

NEM participants, primarily generators and retailers, hedge their exposure to movements in spot prices by entering into derivative products. Subject to prudent risk management limits, Hydro Tasmania stands ready to contract with all comers against the Tasmanian regional reference price on an equitable basis.

In short, the wholesale energy market is delivering least cost and cost effective outcomes, evidenced by comparison of Tasmanian wholesale prices against prices in other NEM regions. Hydro Tasmania has given detailed information on cross-jurisdictional price benchmarks to the Panel which supports Hydro Tasmania's current spot market and hedge contract pricing.

Supporting the retail market

Retailers selling to Tasmanian customers, and major industrial customers in Tasmania, enter into hedge contracts with Hydro Tasmania to protect them against volatile spot prices and lock in retail margins.

Hydro Tasmania is proud of its role in providing hedges to these major industrial customers on terms which are ensuring the continuity of their businesses in Tasmania. These businesses compete in international markets, so Hydro Tasmania's contract terms need to be competitive, not just within the NEM, but on an international basis.

¹ Based on Hobart CPI figures.

Although the individual characteristics of any contract influence its terms, Hydro Tasmania offers pricing, and other terms and conditions, to retailers to support their supply to contestable customers using the same starting point as it uses for making offers to major industrial customers.

Because of the size of its current contestable load, Tasmania has not gained the attention of the major national electricity retailers, particularly with recent sales of government owned retail assets in Queensland and New South Wales taking centre stage. Now that those sale processes have been completed, Hydro Tasmania believes that these national retailers will start to take an interest in Tasmanian electricity consumers once the final tranche of Tasmanian customers becomes contestable. Without this final tranche of Tasmanian customers becoming contestable, Hydro Tasmania believes that NEM retailers have insufficient incentive to enter the Tasmanian jurisdiction.

In the absence of a large tranche of retail customer base being sold, a new entrant retailer needs to be able to enter any region or market gradually and organically. This requires access to a form of hedge contract that minimises the retailer's load acquisition risks (perhaps a load-following drawdown hedge facility). Hydro Tasmania is aware of such products being offered by generators elsewhere in the NEM and would be pleased to provide an equivalent in respect of the Tasmanian region. As Hydro Tasmania has no direct access to Tasmanian customers, other than the major industrial customers who participate at a wholesale derivative level, it has a commercial incentive to support an increase in the number of new entrant retailers serving Tasmanian customers.

Network prices

Network charges comprise a significant proportion of customers' electricity bills. As discussed in Section 5 below, the AER has recently indicated that the regulatory framework under which these prices are set needs to be overhauled to ensure it produces more efficient pricing outcomes.

Full retail contestability

Hydro Tasmania already supports new entrant retailers seeking to enter Tasmania, and continues to have discussions with retailers not presently in Tasmania to ascertain what Hydro Tasmania can do to assist those retailers should they wish to enter Tasmania. As Hydro Tasmania is statutorily barred from holding a Tasmanian retail licence, Hydro Tasmania has no incentive to do anything other than support new entrant retailers.

Key investments

Hydro Tasmania's decision to enter into arrangements to facilitate the development and operation of the Basslink interconnector was taken over a four year period (1999 - 2002), during which Hydro Tasmania undertook extensive commercial, operational and legal due diligence on the proposed arrangements. Some of the key reasons behind this decision included enabling Hydro Tasmania (and its Tasmanian stakeholders) to realise the full value of its unique assets and system peaking capability, to increase flexibility in the way in which Hydro Tasmania could use its water reserves and to facilitate market-based contract pricing for Tasmania's customers, including major industrial customers whose operations are critical to the broader Tasmanian economy.

The decision to enter into the Basslink arrangements has been proven to be a sound financial decision for Hydro Tasmania and the State. The last five years of Basslink's operations have resulted in a positive financial outcome for Hydro Tasmania, as a result of interregional trading opportunities, cost minimisation during the drought, increased ability to capture high inflows and a NEM market price for generation. Detailed figures provided to the Panel have substantiated this position.

Hydro Tasmania's decision to enter into the Basslink arrangements and other associated changes in the Tasmanian electricity supply industry have fundamentally changed the nature of Hydro Tasmania's business. In the 2010/11 financial year, only 29% of Hydro Tasmania's Tasmanian revenue related to the supply of Tasmania's non-contestable load, compared to 60% in the 2006/07 financial year. From 2009/10 to 2010/11, Hydro Tasmania's revenue from mainland operations more than doubled.

While the interconnector has contributed to "drought proofing" Tasmania's electricity supply, no "premiums" are paid by any sector of the Tasmanian population in relation to Basslink for this capability. Hydro Tasmania sets contract pricing by reference to Victorian contract prices, and does not tie any of its contract pricing to input costs, whether they be the cost of particular generating units or the cost of Basslink. The same generally applies to spot pricing as well, although this is occasionally subject to other factors such as transient market conditions. Hydro Tasmania has provided detailed information to the Panel in relation to Basslink to assist the Panel in understanding Hydro Tasmania's use of this complex infrastructure asset.

Governance

Hydro Tasmania is a market facing business. Unlike regulated entities, its revenue is derived from the market and is not related to its cost structure. Hydro Tasmania sells electricity at competitive prices, manages its exposure to merchant risk and manages its costs down to the minimum sustainable level. The Board and management of Hydro Tasmania are focused on running a commercial, competitive business with the highest standards of corporate governance.

Direct Response to Issue Paper Questions

The balance of this document will respond in detail to the specific issues on which the Panel has sought submissions in its June 2011 Issues Paper. Please note that the section headings, and issues, outlined in bold font below, track the headings and issues as they appear in the Issues Paper. Hydro Tasmania's submission has sought to address only those questions relevant to it. For completeness, we have listed those questions not addressed in Appendix One.

All abbreviations are explained in the glossary at the end of this submission.

1. Retail Sector

1.1 For contestable customers, how has the move to contestability impacted on electricity purchasing decisions, for example:

- **Changes in pricing levels, and how each part of the supply change is contributing to those changes.**
- **Pricing predictability.**
- **Contract duration.**
- **Spot market exposures.**

There are three distinct groupings of contestable customers in Tasmania, being:

- a group comprising the four major industrial customers located in Tasmania;
- Tranches 1 - 4 of Tasmanian contestable customers (excluding the major industrial customers referred to above); and
- Tranche 5a (which became contestable on 1 July 2011).

Hydro Tasmania's experience with the four major industrial customers located in Tasmania is that they seek to negotiate nationally and internationally competitive supply prices, and have approached Hydro Tasmania to support those prices with hedge contracts. Hydro Tasmania provides inter-regional hedge pricing on request, and has done so for each of the four major industrial customers. This has allowed each of these customers to benchmark Tasmanian hedge prices against mainland options. To date, to Hydro Tasmania's knowledge, these prices have only been used for analysis and negotiation as these customers have decided that Hydro Tasmania's Tasmanian region contract prices are acceptable in the context of the NEM and their broader businesses.

The major industrial customers have used these hedge arrangements to make plant investments that have improved the length of the economic and productive life of their

facilities. These customers engage separately with retailers and with Transend for competitive and regulated services respectively.

The major industrial customers also benefit from the ability to offer load interruption for Basslink. This load interruption is triggered simultaneously with the interruption of Basslink (when on import). This interruption service increases the import capability of Basslink from 144MW to 478MW.

The additional 334MW of import capability, when combined with the interregional revenue Hydro Tasmania receives from BPL under the BSA, allows Hydro Tasmania to source up to 334MW of supply to the major industrial customers at lower Victorian prices (e.g. off-peak) by replacing its own generation with imported electricity. Hydro Tasmania has incorporated the flexibility created by the physical and financial characteristics of its Basslink arrangements into its long term transactions with the major industrial customers.

Contestability has ensured that each customer can enter into tailored relationships that reflect their: consumption characteristics; plant flexibility to reduce demand; and, appetite to participate in the spot dispatch of the wholesale electricity market. These major industrial customers generally have in-house expertise and/or employ expert advisers to assist them optimise their supply arrangements. These arrangements are comparable with those achieved in other NEM jurisdictions. Some of these customers have spoken publicly about the relevance of these contractual arrangements to their long-term plans.

In 2007, one major industrial customer stated that its 10 year hedge contract with Hydro Tasmania was an excellent result for the customer.² In 2010, another major industrial customer stated that the successful conclusion of a hedge contract with Hydro Tasmania, to commence in 2015, ensured the customer's smelter would continue in Tasmania for its employees and contractors and their families.³

Tranches 1 - 4 of Tasmanian contestable customers have been able to contract for the supply of energy at lower prices as a result of the roll-out of contestability (which commenced for Tranche 1 in July 2006 and extended to Tranche 4 in July 2009). There have been some reported examples of customers entering into agreements with retailers other than Aurora on the basis of price, service and/or additional products. For example, Transend announced that from July 2010 it sourced approximately 10% of its energy from a new retailer because it received a "better offer".⁴ Hydro Tasmania also currently purchases approximately one-third of its energy requirements from a retailer other than Aurora, as it negotiated better arrangements with that third party. Similarly, in January 2011 the Tasmanian Government announced that it also had decided to contract with a retailer other than Aurora.

Hydro Tasmania has heard of various experiences for customers who have chosen spot price exposures, but notes that, despite the risk to the contrary, spot prices have been lower than contract prices in all regions of the NEM on average in most years. The process by which contestable customers obtain, compare and enter into competing energy offers is the same as used in other NEM states where brokers often assist customers in getting the best from the marketplace.

² Zinifex press release dated May 2007.

³ Rio Tinto Alcan press release dated December 2010.

⁴ From an article appearing in The Mercury on 9 February 2011.

Contestable contract prices in Tasmania are currently much lower than the new entrant prices used to calculate the wholesale component of non-contestable customer tariffs, so contestable customers see this benefit when moving from a regulated to a contestable contract. Data to support this proposition has been provided to the Panel.

Tranche 5a of contestable customers have not been contestable for very long, and outcomes for them are less observable, so Hydro Tasmania has no informed observations to make about their experiences.

1.2 The importance of diversity in managing wholesale energy risk and the extent to which it drives competitive behaviour in the retail sector.

Retailers in Tasmania have at least four theoretical options for managing wholesale energy risk in Tasmania: Hydro Tasmania; AETV; the use of inter-regional products to use Victorian (or other NEM region) prices; and purchasing from other planned generators in Tasmania.

Hydro Tasmania makes its hedge products available to any retailer or prospective retailer in Tasmania, and any potential retailer could choose to either build its own generation or contract with the developer of new generation in Tasmania. Hydro Tasmania is not aware of Aurora's (as owner of AETV) appetite for providing contracts to competing retailers.

The way in which Hydro Tasmania prices is always referable to Victorian prices, so the practical utility of inter-regional products or purchases from new entrant generators is limited. The attractiveness of either option will improve in particular circumstances (for example, a substantial increase in Victorian prices may make new generation more attractive), so the continued presence of these options is important for dynamic efficiency.

Hydro Tasmania does not consider that Tasmania lacks the diversity required for retailers to actively participate in Tasmania. The reasons are clear, the slice of customers that are contestable is small at about 3000GWh (including Tranche 5a) and the incumbent retailer has the advantage of having its own generation.

Hydro Tasmania has the commercial incentive to offer NEM competitive prices to any retailer in Tasmania, and has always been eager to do so.

1.3 The ability of a retailer to contract with parties that have generation located in other NEM regions.

Hydro Tasmania has attempted to encourage counterparties to use inter-regional products but the good availability and competitive pricing of Tasmanian hedges has led to no interest in inter-regional products. Hydro Tasmania has offered inter-regional swaps which have no basis risk in preference to the inter-regional revenues (IRRs), which provide a more risky option for counterparties. Detailed information has been provided to the Panel about inter-regional swaps and IRR products.

1.4 The potential barriers to effective retail competition in Tasmania, including:

1.4.1 The attractiveness of the retail market, particularly size and nature?

Without FRC, there is little point in the national retailers entering the Tasmanian retail market because of the relatively small number of currently contestable customers in this jurisdiction.

1.4.2 The extent to which the commercial structure of Aurora Energy as an integrated retail and distribution entity is a material barrier to new entry, such as through access to information from its distribution business or its ability to absorb thinner retail margins supported by the cash generated by its distribution business?

Functional and accounting ring-fencing guidelines have been developed by the Tasmanian Economic Regulator.

In February 2011, the AER requested certain changes to the Accounting Ring-fencing Guideline to facilitate transfer of the economic regulation of distribution services provided by Aurora from the Tasmanian Economic Regulator to the AER. However, this apart, the Functional Ring-fencing Guideline was developed in 2004 and does not appear to have been reviewed since.

Hydro Tasmania therefore invites the Panel to examine the effectiveness of the ring-fencing between Aurora's distribution and retail businesses, including the extent to which such ring-fencing is structurally enforced.

1.4.3 Do all retailers face similar risks or does size pose a greater degree of transparency in the wholesale market?

Hydro Tasmania considers that small retailers cannot take the same hedge risks as larger retailers. Small retailers, with smaller margins and balance sheets, need to be conservative, to obtain as close to perfect cover as they can get.

Various factors impact the magnitude of risks faced by retailers of differing sizes, including:

- Credit
 - Smaller retailers tend to be less 'credit worthy' than larger retailers. This limits a small retailer's ability to enter into counterparty agreements as a result of being viewed as a 'riskier' counterparty, thus leading to increased 'credit risk' premiums charged by counterparties on over-the-counter (OTC) transactions;
 - Smaller retailers also do not typically own generation. As such, they are likely to face increased AEMO prudential risks and thus require higher financial capital to remain a market participant. (Note: Smaller retailers typically undertake reallocation agreements with third party counterparties, however, this generally comes at a premium, thus increasing the risks they face as a result of decreased expected profitability);
 - Given the potential magnitude of 'variation margins' associated with dealing in electricity futures markets, a retailer's risk management strategy may be limited to OTC transactions as a means of managing its cash position;

- Customer segmentation and number of customers;
 - Large customers typically exhibit a different ‘usage profile’ from residential customers or small and medium businesses. As such, a retailer’s ‘volumetric risk’ is also characterised by the customer segment which it targets. As such, a ‘small retailer’ with a relatively ‘undiversified’ customer segmentation within its portfolio or ‘small load’ does not attain the benefits of ‘portfolio synergy’ (i.e. residential / small and medium business loads peak and trough at times different from large customers) benefits reaped by large retailers;
- Hedging strategy;
 - Provided retailers are not capital constrained (i.e. are able to fund the cost of hedging), the degree to which a retailer (whether small or large) chooses to hedge its exposure is a function of its risk appetite, risk policies, market views and other factors.

The degree of transparency in a wholesale market is a factor of the markets in which a retailer chooses to undertake its hedging. Market participants in the electricity and renewable energy certificate markets are faced with transacting in OTC or futures markets. Transactions undertaken in futures markets are undertaken via a clearing house and are exchange traded, thus assuring confidentiality and ‘limiting’ wholesale market transparency. OTC market trades do not feature the same mechanisms as futures markets. In essence, the relationship between ‘retailer size’ and ‘degree of transparency’ is not immediately evident but instead a function of markets in which a retailer chooses to participate, all things being equal.

1.5 In what ways has the regulatory framework delivered retail costs that are higher than would be delivered by a fully competitive retail market in Tasmania?

The price comparison information on OTTER’s website shows that electricity prices paid by Tasmanian residential and small business customers are roughly the Australian average for such prices.

As is usually the case with regulated contracts in NEM regions, Tasmanian non-contestable contracts prices are higher than those charged under contestable contracts. In Tasmanian, this is primarily because the Tasmanian regulatory framework has mandated that the current wholesale energy component of non-contestable customer contracts be calculated using long run marginal costs (or LRMC). The average annual spot prices in NEM regions are not close to LRMC, and Hydro Tasmania's experience of OTC hedges are also not close to LRMC.

1.6 What customer outcomes have influenced contestable customers switching retailers?

As mandated by the Tasmanian electricity legislation, no member of the Hydro Tasmania group retails electricity in mainland Tasmania. However, Hydro Tasmania's subsidiary Momentum retails electricity in all other member jurisdictions of the NEM.

Hydro Tasmania's experiences with Momentum are that customers are most interested in price, but that service (primarily billing issues and resolution of billing issues) is also a key driver. Customers also react to different customer interfaces, and different segments of customers will respond to different products. An effective retailer understands these segmentation issues, and tailors its marketing accordingly.

The behaviour of salespeople can be a factor in a customer's decision whether to switch. Switching can also be influenced by the bundling of electricity offers with other products such as gas. The inclusion of inducements such as discounts, giveaways and prizes alongside sustained marketing campaigns can cause switching which is just as much emotional as it is price driven.

2. Pricing

2.1 What examples of cross-subsidies do stakeholders think exist in the market and how do they arise?

There is no cross-subsidy in Hydro Tasmania's spot or contract prices. Specifically there is no cross-subsidy between the prices Hydro Tasmania offers to major industrial customers and other customers, and Hydro Tasmania does not price electricity to major industrial customers below cost. All contestable customer price offers are based on prevailing NEM market rates, and any variability in these rates affects Hydro Tasmania's profit, not the price offered to other customers.

This is not to say that all contracts are priced at the same level. Hydro Tasmania determines its contract pricing by reference to its Victorian sale opportunities, but price outcomes for any individual contract will vary depending on the individual characteristics of the contract. These may include load profile, contract term, alternative sale opportunities and other individual factors.

There is also no cross-subsidy in relation to Basslink. Hydro Tasmania sets contract pricing by reference to Victorian contract prices, and does not include any cost of Basslink in setting contract (or spot) prices.

3. Wholesale

3.1 What does the history of spot market prices demonstrate about the effectiveness of competition in the Tasmanian spot market?

The history of spot market prices in Tasmania shows that these prices sit at NEM levels. Sometimes they sit higher, sometimes they sit lower. Where they differ, it is a result of the passing supply and demand dynamics in various NEM regions.

Details of comparative pool prices by region have recently been published by the ACCC:⁵

Table 1: Volume weighted average spot electricity prices (\$ per megawatt hour)⁶

	TAS	QLD	NSW	VIC	SA
2009-10	30	37	52	42	82
2008-09	62	36	43	49	69
2007-08	57	58	44	51	101
2006-07	51	57	67	61	59
2005-06	59	31	43	36	44

Hydro Tasmania has calculated the following equivalent figures for 2010/11:

	TAS	QLD	NSW	VIC	SA
2010-11	31	34	43	29	42

These statistics clearly demonstrate that competition is effective at producing competitively priced outcomes in Tasmanian spot dispatch.

The NEM region which drives all Hydro Tasmania's Tasmanian pricing decisions is the Victorian region. Set out below is a table, which Hydro Tasmania included in its submissions on the Panel's discussion papers (updated for Q2 2011). Below the table is a description of the passing supply dynamics that impacted on these prices.

⁵ACCC's State of the Energy Market 2010

⁶ Volume weighted: The sum of the half hour spot price x regional demand divided by the sum of the half hour regional demand for the period

Table 2: Time weighted average annual spot price for the Tasmanian and Victorian regions by Quarter.⁷

State	Period	2006	2007	2008	2009	2010	2011
Vic	Q1	\$43.88	\$64.62	\$43.27	\$62.35	\$50.00	\$35.33
Tas		\$32.59	\$49.21	\$53.25	\$51.90	\$26.55	\$26.77
Vic	Q2	\$28.48	\$90.92	\$45.41	\$32.93	\$44.33	\$29.35
Tas		\$36.14	\$72.33	\$59.64	\$96.12	\$37.64	\$31.62
Vic	Q3	\$36.80	\$57.43	\$40.23	\$24.09	\$25.31	
Tas		\$40.58	\$62.64	\$43.08	\$22.91	\$38.78	
Vic	Q4	\$27.50	\$40.99	\$32.12	\$27.11	\$18.59	
Tas		\$36.37	\$43.23	\$43.10	\$30.40	\$20.58	
Vic	Annual	\$34.13	\$63.37	\$40.29	\$36.51	\$34.47	
Tas		\$36.44	\$56.91	\$49.79	\$50.24	\$30.92	

- Noticeable price separation between the regions (say 10%) occurs in 14 out of 22 quarters. These are split evenly between Victoria and Tasmania with both setting the higher price outcomes for the same number of instances.
- Tasmania and Victoria have some very different demand and supply characteristics.
- Victoria is summer peaking demand driven by hot weather (and so tends to separate upwards in Q1 (January to March)) while Tasmania is winter peaking demand driven by cold weather (so tends to separate upwards in Q2 and Q3).
- Victoria is predominantly thermal supply while Tasmania is predominantly hydro supply and so is exposed to upward price separation during periods of low inflows, particularly for medium sized storages and run of river generation.
- The high average spot price in Tasmania in the second quarter of 2009 is attributable to discrepancies in the risk management positions associated with either the late commissioning of AETV's CCGT plant or the evolving nature of the market.

However, it is important to understand that spot market prices do not provide the complete picture. Rather than looking at spot prices, reference should be made to the net outcome of the spot and contract positions.

For example, in respect of the high price events in June 2009, Aurora has stated it incurred \$8.6m in costs. Hydro Tasmania has separately calculated that its additional revenue from these events was in the order of \$3m. This means there is a \$5.6m differential which has been made by other parties (for example, Tasmanian major industrial customers which shed load may have been rewarded for doing so).

Further, in examining spot price outcomes, the Panel should not confuse temporary high spot prices caused by business decisions made by market participants with structural problems.

⁷ Time weighted: The sum of the half hour spot prices divided by the number of half hour spot prices

3.2 What aspects of the Tasmanian market architecture and/or underlying features create sustained and transparent competitive influences in the wholesale market?

Basslink means that Hydro Tasmania's marginal costs are almost always set by reference to the Victorian spot price. Basslink constraints are the exception, but while Tasmanian demand and supply are reasonably balanced this is at the margin.

3.3 Are there material barriers to entry arising from the wholesale sector architecture of the Tasmanian generation sector?

No. The existing wholesale energy market did not act as a barrier to entry when Alinta made its decision to enter the wholesale generation sector in Tasmania. The prime factor driving any new generation capacity is demand. In this respect, it should be noted that Tasmania's annual growth in electricity demand is considerably below that of the mainland member states of the NEM. Currently Tasmanian demand does not warrant building additional capacity.

3.4 When contract levels are high, i.e. a large proportion of the total load is subject to wholesale contracts, what is the material impact of a high-priced event in the spot market?

It is not as simple as looking at overall contract levels, rather one needs to look at the position of each participant. Individual participant cover may not match the participant's load, so there can be sector winners and losers.

3.5 Does Hydro Tasmania have the capacity to raise or lower spot prices based on its knowledge of the contract positions of its counter-parties and is there evidence that such a capacity has been exercised?

No. Hydro Tasmania only has an incentive or capacity based on knowledge of its own contract position. It does not know the position of contracts between other counterparties, such as between Aurora and Tasmania's major industrial customers, nor the potential physical response of others to any high price event.

3.6 How contestable, efficient and effective is the market for wholesale contracts in Tasmania?

This market is wholly contestable. There is no restriction on commercial dealings at the wholesale level.

The market is efficient. Hydro Tasmania understands that there is no public data, and data of any sort is relatively scarce as the low level of retail contestability means that wholesale contracts in respect of the Tasmanian region are thinly traded. However, the efficiency of the market can be established by the Panel by reviewing the prices at which those contracts are traded compared to equivalent prices in other NEM regions, particularly Victoria.

The market is effective because any retailer or wholesale customer who wishes to obtain a contract can secure one and the volume and profile of the contract will correspond to the retailer's or customer's request.

Since the wholesale contracts that are available in Tasmania are tailored to the requirements of the requesting counterparty, any intervention in the wholesale market would reduce contracting flexibility and would prejudice the market's dynamic efficiency.

Hydro Tasmania is conscious that an interested party has suggested there is a systemic wholesale issue. Our evidence in this submission shows that such a claim is unjustified. Indeed, no party has actually identified any specific example of such an issue or any inefficiency arising out of one.

3.7 How are wholesale contract prices, and other terms and conditions, struck?

As stated in Hydro Tasmania's undertaking on its website, Hydro Tasmania provides contract prices to approved counterparties on request. In addition, in order to ensure impartiality, at any given time, Hydro Tasmania would show the same underlying prices to different counterparties.

Hydro Tasmania has taken the following steps to enhance price contract transparency.

- Hydro Tasmania shows a standard schedule of prices to active Tasmanian retailers on a weekly basis.
- Hydro Tasmania has also provided this schedule to the Energy Users Association of Australia (EUAA) in the past as well as to electricity brokers on request.
- Hydro Tasmania has previously tried to promote liquidity of Tasmanian derivatives via the over the counter (OTC) broker market but did not attract any interest from other NEM participants. Hydro Tasmania remains keen to promote such price transparency through the OTC broker market and would be more than willing to respond to any price request through that market.

Hydro Tasmania uses standard International Swaps and Derivatives Associated (ISDA) documentation for its cap transactions in respect of the Tasmanian region. Hydro Tasmania's ISDA terms are based on the standard developed by the Australian Financial Markets Association (AFMA), noting minor variations to these terms are often agreed with individual counterparties at the time of negotiating the ISDA documentation, e.g. customised credit terms. These hedge contract terms and conditions are consistent with equivalent terms and conditions used by generators in other NEM jurisdictions where Hydro Tasmania is a purchaser, except that Hydro Tasmania's Tasmanian terms and conditions have reasonable jurisdiction-specific provisions in respect of swap contracts.

There are no jurisdiction-specific provisions used in respect of caps, as the risk profile offered to Hydro Tasmania by cap products does not necessitate any special terms.

Hydro Tasmania issues Standard Tasmanian Terms of Offer (**Tas Standard Terms**) to parties wishing to transact swap transactions with Hydro Tasmania in Tasmania. Two notable differences in Hydro Tasmania's Tas Standard Terms have been:

- Whole of Meter provision

The Tas Standard Terms contain provisions for whole of meter transactions which can be 'turned on' when a load following transaction is entered into. These include comprehensive clauses regarding provision of meter data information, as well as clauses for Permitted Load Variance provisions. Permitted Load Variance provisions are used to limit the volume of a transaction to within an agreed percentage of an expected average quantity over the term.

- Hydrological Risk provision

Hydro Tasmania has in the past included a clause for passing through some hydrological risk. This clause was introduced in response to the very low storage position experienced in 2008 when storage levels fell considerably below 20%.

Hydro Tasmania has recently reviewed and removed this clause. Hydro Tasmania's review determined that the clause is not currently required in order to manage hydrological risk. Hydro Tasmania will continue to regularly assess its hydrological position to monitor whether re-insertion of the clause is appropriate in the future.

3.8 What is the relative negotiating position of the parties and do contract terms broadly reflect contract terms, such as premiums relative to the spot market, available in other NEM regions?

Premiums are not relative to expected Tasmanian spot prices, as concern has been previously expressed about Hydro Tasmania's ability to influence these unilaterally. Hydro Tasmania's contract price offers in Tasmania will reflect prevailing contract prices in Victoria, which is Hydro Tasmania's alternative option for the sale of its output.

3.9 The validity and usefulness of a new entrant LRMC pricing indicator as a measure of the effectiveness of the wholesale energy market in Tasmania.

LRMC is just one of a set of indicators that need to be used to measure the effectiveness of the wholesale energy market in Tasmania. The other key indicators are short run marginal cost and Victorian price benchmarks which (except in circumstances of Basslink being constrained) represent the marginal supply cost.

Short run marginal cost is a half hourly, dispatch driven number. Long run marginal cost is calculated by reference to new entrant costs. Neither methodology reflects competitive market outcomes in the NEM, which fluctuate between (or occasionally even beyond) the two.

For Hydro Tasmania, opportunity cost is actually an intermediate measure, based on the marginal price Hydro Tasmania expects to receive for its contract sales over a one to three year period.

The one year lower limit for this determination is defined by the inflow cycle for Hydro Tasmania's storage system (other than the major inter-annual storages, Lake Gordon and Great Lake). The three year upper limit is less precise, but generally reflects the point where Hydro Tasmania's economic discount rate removes any financial incentive to store water in expectation of superior later returns.

This opportunity cost enables the articulation of principles, although not a mathematical formula, that can define reasonable expectations of short and medium term contract prices for Hydro Tasmania's Tasmanian sales.

These principles are:

- if Basslink is unconstrained, Hydro Tasmania's opportunity cost is the Victorian forward curve, adjusted for transport losses;
- Capacity products are as valuable in Tasmania as they are in Victoria on an annual basis, however, Tasmania is winter peaking whereas Victoria is summer peaking and contract pricing reflects this;
- Basslink constrains on import into Tasmania when Hydro Tasmania's water value exceeds the Victorian spot price. Based on a forecast Victorian price duration curve and forecast inflows, the extent of this constraint can be determined, and Hydro Tasmania's opportunity cost increases to the extent that it is compelled by the constraint to use additional water to back its sold contract position; and
- Basslink constrains on export from Tasmania when Hydro Tasmania's opportunity cost decreases to the extent that this causes Tasmanian prices not to rise to peaks seen in Victoria.

Hydro Tasmania notes that similar conclusions concerning price benchmarks can be found in Frontier Economics' report for the NEM Generators' Group in respect of a recent AEMC rule change consultation.⁸

3.10 Is there any evidence of latent market power in the Tasmanian wholesale market, and what are its consequences?

Market power is the ability to act unconstrained by market response (whether from competitors or otherwise). Hydro Tasmania does not have this power, whether latent or otherwise. Hydro Tasmania has provided extensive material to the Panel explaining the nature of the constraints on its operation. These constraints include:

- the threat of new entrant generation;
- the need to manage hydrological risk;
- the behaviour in spot dispatch of Victorian generators, other Tasmanian generators and major industrial customers;
- the delivery risk associated with being able to back a contract, including the risks associated with the availability of Basslink;
- the need to secure sustainable future revenues through longer term contracts.

Even if one assumes that latent market power might exist, there are many examples of oligopoly markets in Australia. Good regulatory practice dictates that regulators should only intervene when there is a benefit in doing so and no such benefit has been identified in the Panel's process.

⁸ This report can be found at www.aemc.gov.au/Electricity/Rule-changes/Open/Potential-Generator-Market-Power-in-the-NEM.

4. Wholesale Pricing for Non-Contestable Customers

4.1 The use and application of the existing form of LRM methodology in determining the wholesale energy allowance for non-contestable customers.

Hydro Tasmania believes that FRC with safeguards is a much superior solution to regulated pricing energy for small customers such as householders. It is interesting to note that for the customers in the first four tranches in which FRC was introduced to Tasmania, there are no safety net provisions and their experience appears to have been very positive. The lack of safety net provisions does not appear to have been a problem and Hydro Tasmania encourages the Panel to validate this observation with these customers.

The benefits of FRC are:

- customers can choose their retailer and trade-off price and volume depending on their service and brand preferences;
- it encourages innovation;
- the pricing is flexible and responds to market conditions whereas regulatory pricing is effectively set every three years based on assumptions at the beginning of the period; and
- it brings Tasmania into line with every other NEM jurisdiction.

If the Government chooses to not introduce complete FRC in Tasmania, the regulatory arrangements should not be prescriptive but should express the desired high level objective and leave the independent Regulator with the discretion to implement a suitable approach. This is also the best way for the Government's conflicting roles to be resolved and to enhance credibility in the independence of the Regulator.

The current approach of using the LRM methodology is theoretically sound if there is a potential requirement for new generation to supply customers, as the market price will theoretically rise to new entrant pricing (long run market cost (LRMC) of a new entrant). However, the current approach has failed to recognise that in the medium term there is no requirement for new generation in Tasmania. In addition, the Federal Government's renewable energy target for large-scale technologies such as wind (known as the LRET) may well cause additional new entry of wind in Tasmania. This means that the need for customers to pay the LRMC of a new entrant, while correct in the long term, is higher than is required by the market at the moment.

This could be resolved by changing the regulations to allow the Regulator to use market prices for non-contestable customers. This would, in our view, be a wasted opportunity and the implementation of FRC would be a far better approach with some additional measures to encourage retailers to come to Tasmania. One key measure would be to link the retail market arrangements to another state so that a retailer who already operates in that other state would have no additional costs in retailing in Tasmania.

5. Network Issues

5.1 The experiences of customers regarding the efficiency and effectiveness of Tasmania's network businesses in the delivery of capital programs.

Hydro Tasmania's experience, as a connection customer, is that NSPs' execution of projects is to an appropriate industry standard.

The delivery of connection assets is critical for the successful completion of Hydro Tasmania's new wind projects.

Overall, the costs of transmission service provision on a dedicated basis for a customer and the cost for connection are significant. In instances where the option is available to it (and so the service is effectively open to competition), Hydro Tasmania has found it is considerably cheaper to fund these costs itself, through ownership of the connection assets and contracting operational services, and seek to limit the involvement of the NSP in the provision of network asset services.

Due to the asset focus of NSPs (they are commercially rewarded for building new assets), Hydro Tasmania at times finds it difficult to convince NSPs to address low cost operational issues that impact on the operation of the transmission system.

5.2 The extent to which the NEM arrangements and/or jurisdictional changes have required additional network investment and/or direct customer costs to increase?

As is often noted, transmission and distribution charges together represent over 50% approximately of a customer's bill. In a recent television forum, a representative of Choice magazine states that the single biggest factor pushing up energy prices is infrastructure.⁹

The way in which Tasmanian transmission charges are set is regulated by the AER under the National Electricity Rules. The Chairman of the AER has recently stated that changes to the relevant provisions of the National Electricity Rules are necessary to promote efficient investment in and efficient operation and use of energy services for the long term interests of consumers of energy.¹⁰

Hydro Tasmania endorses these comments.

⁹ Interview on SBS' Insights Program "Power Play" between Jenny Brockie and Matt Levey of Choice magazine on 2 August 2011.

¹⁰ See, for example, Andrew Reeves' speech entitled "Finding the balance - the rules, prices and network investment" given at the EUAA's energy price and market update seminar.

6. Value Considerations of Major Investments

6.1 The extent to which the anticipated benefits of Basslink to Tasmanian electricity customers are being delivered and the value placed on those benefits by customers.

Hydro Tasmania has provided detailed information to the Panel:

- demonstrating the commercial viability of the Business Case for Basslink
- including a comprehensive analysis of the net value of Basslink during its initial five years of operation.

A significant portion of this information is of a commercially sensitive nature and cannot be provided publicly. However, the sources of value for Hydro Tasmania from Basslink include:

- providing opportunities through its flexible hydro generating system to trade price differences (“sell high and buy low”) between:
 - peak and off-peak;
 - seasonally; and
 - year to year;
- providing market based pricing to contestable customers;
- increasing water utilisation through reducing the amount of spill; and
- avoiding the cost of thermal support and load interruption to manage system security

Hydro Tasmania's calculated net benefit for Basslink fluctuates greatly year on year. The greatest annual net benefit has been in the order of \$100m, while the arrangement generated a relatively small loss in one year. Over the five years 2006/07 to 2010/11, the annual net benefit averages in excess of \$40m. The sources of value differ greatly from year to year, with the avoided cost featuring strongly during and immediately after the drought, while generation and sales opportunities have predominated more recently.

6.2 In the event that a carbon pricing mechanism delivers significant increase in the value of Hydro Tasmania, how ought that additional value be utilised?

Hydro Tasmania's leading status in the clean energy sector will give the business a natural competitive advantage under carbon pricing. This can be expected to result in benefits to Hydro Tasmania's business and to the State as a result of Hydro Tasmania's low emissions status. Increases in the value of Hydro Tasmania through improved asset values and revenues can provide the opportunity to strengthen and enhance Hydro Tasmania's role as Australia's leading producer of renewable energy and to continue to refurbish and modernise our ageing asset fleet.

Furthermore, increases in the value of the business will strengthen Hydro Tasmania's ability to pursue its strategic objectives: to grow the business; build its financial strength to reduce debt; and to increase returns to its owner, the State of Tasmania.

The Tasmanian Government determines the extent of Hydro Tasmania's annual return in the form of a dividend and any other costs and charges. In June, the Government lifted the rate of dividend from 50% to 70% of Hydro Tasmania's annual profit after tax. Overall, Hydro Tasmania is expected to return more than \$110 million to the Government in 2011/12. How any benefit from increased company dividends is passed on to the community is a matter for the Government and Hydro Tasmania will continue to work with its shareholder to ensure the State continues to benefit from almost 100 years of investment in renewable energy infrastructure.

7. Governance

7.1 What application of private sector continuous disclosure arrangements could be applied to the SOEBs, given community ownership of the businesses?

This is a general policy question relating to public scrutiny of all public affairs. The continuous disclosure arrangements contained in the Corporations Act are intended to ensure the orderly operation of capital markets (particularly the stock exchange) and consequently do not have direct theoretical application to government owned businesses since there is no market involvement in the application of capital.

As a Government owned integrated generator/retailer in the NEM, Hydro Tasmania is subject to far greater disclosure obligations and scrutiny, such as right to information powers and this Panel process, than its private sector counterparts. This provides Hydro Tasmania's private sector competitors with commercially sensitive information on the business which is not reciprocated through the ASX disclosure arrangements.

Furthermore, the corporate governance model applied to Hydro Tasmania, including Ministerial and Parliamentary oversight, is far more onerous than private sector entity. With regard to reporting, it is a measure of Hydro Tasmania's comprehensive disclosure arrangements that it is a previous winner and perennial finalists in the energy sector annual and sustainability reporting awards.

7.2 How stakeholders view the competing objectives commercial and broader Government policy objectives of SOEBs.

Hydro Tasmania gives primacy to commercial objectives, as it is required to do under the provisions of the Government Business Enterprises Act (Tas). These provisions result in a transparent balance of commercial and policy objectives. This is not to say that Hydro Tasmania operates without regard to broader societal issues. All major corporations need to balance financial objectives with their obligations to the society in which they operate. Hydro Tasmania does this through the application of its sustainability principles. Further details of Hydro Tasmania's sustainability principles and how these are applied can be found in Hydro Tasmania's annual reports.

Hydro Tasmania acknowledges that this question should be more appropriately answered by other stakeholders.

7.3 How stakeholders view the impact of competing objectives on SOEB performance and electricity market outcomes.

For Hydro Tasmania market outcomes determine financial performance since these outcomes drive Hydro Tasmania's revenue opportunity. Hydro Tasmania's performance is also subject to non-market risk factors. Most notable among these is the hydrological risk

Hydro Tasmania faces. A significant driver of Hydro Tasmania's commercial strategy is the mitigation of both market and non-market risks. Hydro Tasmania firmly believes that as a market-facing entity it is better placed to manage these risks than any of its stakeholders, as it is impossible and unwieldy to replicate the sophisticated management capability needed to manage a merchant risk business operating in the NEM.

7.4 Comments on the Panel's view that compromising efficient electricity sector outcomes to achieve financial outcomes for the SOEBs or the taxpayers would not be in the community's best long-term interest.

Hydro Tasmania has noted the Panel's observation that compromising efficient electricity sector outcomes to achieve financial outcomes for the SOEBs or taxpayers would not be in the community's best long-term interests. If government or the community wishes to achieve some policy objective which impacts on the energy market, this should be done transparently so that the efficiency and effectiveness of the market are not compromised.

7.5 The role of Shareholder Ministers in driving business performance – both financial and operational.

(refer to answer below)

7.6 The role of Shareholder Ministers in driving business efficiencies to improve electricity prices for Tasmanian customers.

Hydro Tasmania sees the role of Shareholder Ministers as approving the SOEB's business charter and business plan. It is management's responsibility to manage financial and operational performance in line with the expectations of the Shareholder Ministers. The Shareholder Ministers also have a role in holding the management of the SOEBs to account for the achievement of the plan.

This model is consistent with current practice. It allocates responsibilities to those best placed to manage them and is broadly in line with the role of shareholders and boards / business management in the private sector. It is the role of the Boards of the SOEBs, on behalf of the Shareholder Ministers to drive business performance.

7.7 How the Tasmanian community, as the ultimate owner of the SOEBs:

7.7.1 Views the additional risk associated with SOEBs expansion into non core activities and/or operations outside Tasmania.

Hydro Tasmania's view is that not all operations outside Tasmania are non-core or result in additional risk. Hydro Tasmania is exposed to the following risks in Tasmania, which are largely uncontrollable:

- a significant reduction in revenue due to a major industrial customer leaving Tasmania;
- market dynamics of the Tasmanian region – if Hydro Tasmania only operated in Tasmania it would be exposed to significant market concentration risk; and

- hydrology.

The connection of Basslink was Hydro Tasmania's first major investment outside Tasmania. Basslink was used extensively as a source of supply during the drought period (reducing hydrological risk) and it gives Hydro Tasmania access to the Victorian region, providing Hydro Tasmania an alternative market into which to sell its energy and reducing market concentration risk faced by Hydro Tasmania.

Momentum, a mainland retailer acquired by Hydro Tasmania and subsequently built up into a highly successful business, is the critical element in managing Hydro Tasmania's risk exposure. Momentum allows Hydro Tasmania to further diversify its revenue sources, as it now can derive revenue from selling directly to retail customers and is no longer reliant solely on the wholesale market for revenue. Hydro Tasmania needs to carefully manage the risks around Momentum, including ensuring Momentum's retail load is backed appropriately. However, these risks are similar to those faced by all privately owned energy companies and have been shown to be largely controllable, unlike the largely uncontrollable risks (especially hydrology) faced by Hydro Tasmania in Tasmania. Effectively we have switched uncontrollable risks in Tasmania for risks which are capable of being managed in Tasmania.

Upon disaggregation, Hydro Tasmania acquired responsibility for the consulting business of the former fully integrated entity. This business is run on a stand-alone competitive basis in accordance with the commercial principles of any professional consultancy. The consulting business enables Hydro Tasmania to leverage off its world renowned hydro power and water resource management capabilities at a time when the world is looking to clean-tech solutions for both energy and water resources.

7.7.2 Views the trade-off between capital growth and the SOEBs and the return of dividends.

The shareholder does not have a clear-cut choice between capital growth and the return of dividends.

Hydro Tasmania operates to maximize the return of dividends to the Tasmanian people over time. It does this by delivering dividends for the State Budget in the current year, while also delivering projects that will maintain and enhance the stream of dividends in the long term.

7.8 The broad financial performance of the SOEB portfolio – does the community receive a reasonable return for its investment in the portfolio, and what could be done to improve it?

Hydro Tasmania acknowledges that its returns to Government over the period since disaggregation have not met commercial benchmarks when assessed against its balance sheet equity (retained earnings). Any assessment of Hydro Tasmania's financial performance needs to take into account the nature of the business that was established at disaggregation.

Hydro Tasmania's electricity generation capability is based upon a portfolio of integrated generation plant that is strategically located at optimum water catchment points on mainland Tasmania. These assets are by their nature highly capital intensive and on a megawatt installed basis far more expensive than thermal plant. Their advantage, however,

lies in their ability to access a renewable source of energy that is relatively low cost on an annual basis but subject to significant volatility through hydrological risk. Unfortunately, the price of electricity in the NEM wholesale market is dictated by the predominance of low cost brown coal. Therefore, Hydro Tasmania effectively enjoys the same electricity price as Hazelwood and receives no value for the fact that its production results in zero emissions while Hazelwood produces 1.3 tonnes of CO2 for each MWh produced. It is therefore impossible within the current non-carbon price electricity market for Hydro Tasmania to earn a sustainable return. Clearly, the business is looking to the introduction of a carbon price to remedy this state of affairs.

In the interim, Hydro Tasmania has placed considerable emphasis on reducing and maintaining its operating cost base so that it would attain cash operating cost levels consistent with best commercial practice. This solid foundation will ensure that with the inclusion of a carbon price in the NEM Hydro Tasmania will be able to produce a properly reflective return on its capital investment.

In 1998, on disaggregation of the vertically integrated Hydro-Electric Corporation into the generation, transmission, distribution and retail businesses, Hydro Tasmania carried a number of residual liabilities (not least among them high debt levels as shown in Table 3 and a disproportionate unfunded Retirement Benefits Fund liability) which saw it only break even on disaggregation. The business was then called upon to provide special dividends for a period. Hydro Tasmania did benefit from some reallocation of capital within the SOEBs but is still in the process of trading out of the financial impact of the original residual liabilities and the effect of maintaining security of supply during the drought. The corporate plan of the business is focussed on attaining and maintaining a level of debt consistent with BBB status in credit rating terms. This goal demonstrates strong financial management and the need for Hydro Tasmania to keep overall debt levels under tight control.

Table 3: 1998 Debt allocation and 2010 debt levels for electricity businesses (\$M)

	1998 debt allocation	30 June 2010 debt levels
Hydro Tasmania	\$1013	\$870
Aurora Energy	\$349.5	\$992
Transend Networks	Nil	\$513
Total	\$1362.5	\$2375

Glossary

ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AETV	Aurora Energy Tamar Valley Pty Ltd
AFMA	Australian Financial Markets Association
BPL	Basslink Pty Ltd
BSA	Basslink Services Agreement
CCGT	Combined Cycle Gas Turbine
CPI	Consumer Price Index
EUAA	Energy Users Association of Australia
ESI Act	Electricity Supply Industry Act 1995 (Tas)
FCAS	Frequency Control Ancillary Service
FRC	Full Retail Contestability
GW	Gigawatt
GWh	Gigawatt hour – a consumption of 1 GW for 1 hour
ISDA	International Swaps & Derivatives Association
LRET	Large-scale Renewable Energy Target
LRMC	Long Run Marginal Cost
Momentum	Momentum Energy Pty Ltd
MW	Megawatts
NEM	National Electricity Market
NER	National Electricity Rules
NMR	Notional Maximum Revenue
NSP	Network service provider
OTC	Over the Counter
OTTER	Office of the Tasmanian Economic Regulator (formerly Electricity Regulator)
SOEB	State Owned Energy Business
Swap	A transaction that swaps floating for fixed price and vice versa.
TVPS	Tamar Valley Power Station

Appendix One: Questions not addressed in this response

1. Retail Sector

- What have been the implications of these changes for business decisions?
- The effectiveness of retail participation and competition for larger commercial and industrial customers (Tranche 1 and 2) – what level of competition exists between the 5 licensed retailers and how has it changed since contestability has been introduced?
- The effectiveness of retail competition for smaller commercial, industrial and business customers with the two existing active retailers – have contestable customers observed strong competition on a consistent basis?
- The potential barriers to effective retail competition in Tasmania, including:
 - The extent to which Aurora Energy, as the incumbent retailer, has superior market information on eligible customers as contestability rolls out?
 - The impact of the recent vertical integration of Aurora Energy as a ‘gentailer’ – has this had an impact on the perceptions of its competitive position in Tasmania?
 - Is there a difference in the cost to serve Tasmanian customers in relation to customers in other NEM jurisdictions?
 - What is the relative importance of wholesale market issues compared with other barriers to entry?
- The experience of contestable customers during the roll-out of retail contestability and outcomes of alternate retail options. What changes have customers observed?
- The experience of contestable customers during the roll out of retail contestability and outcomes of alternate retail options. What changes have customers observed?
- What customer outcomes have influenced contestable customers switching retailers?
- Stakeholders’ views on the proposition that weighting that should be placed on potential value implications on Aurora Energy’s retail business from the introduction of FRC, rather than on outcomes for customers.
- How can the ability of customers to participate in the market be improved through the way information is provided?
- Whether it is the role of the Government or the market to provide information for customers to make informed electricity purchasing decisions?
- What forms of improved customer-related information could increase the overall effectiveness of retail contestability (e.g. Understanding of network prices, the ability to compare offers)?

2. Pricing

- Whether it is the principle of a fixed daily charge or its level that is the major issue.
- The impact of the current tariff structure on demand management, energy efficiency and affordability.

3. Wholesale

- How transparent is the underlying position of wholesale market participants in Tasmania, and does this pose a material barrier to entry in either generation or retailing?
- What is nature and extent of differences in wholesale contract in Tasmania, and what drives those differences?
- Does a high level of contract cover represent an optimal risk management position for market participants, and what is the impact of higher insurance levels on end customer prices, noting that insurance is not costless?
- How have the application of the NEM rules in Tasmanian created value opportunities? For example:
 - In shaping the bid stack – where along the supply curve is competition strongest and weakest?
 - How can non-scheduled generation materially shift supply and demand balance and therefore move prices?
- Are there other aspects of the ‘standard’ NEM model that appear inconsistent with the underlying market architecture in the Tasmanian region and evidence to support this view?
- Is there a need for something to support the standard NEM arrangements to deal with specific Tasmanian circumstances?
- Stakeholder views on whether latent market power may be exercised at some point in the future.

4. Wholesale Pricing for Non-Contestable Customers

- How prescriptive should the regulatory arrangements for determining prices be?
- What is the appropriate role of Government in establishing the framework for the regulator, given it multiple interests in the sector?
- How efficient and effective are the current regulatory arrangements in determining efficient energy price outcomes for non-contestable customers?
- What alternative arrangements for setting the energy supply cost allowance might be more appropriate than those currently specified in the current Price Control Regulations?

5. Network Issues

- What can be done to reduce network costs to customers while maintaining appropriate reliability and safety standards?
- The consequences, including costs, for the transmission network arising from physical interconnection and how these costs are distributed to customers?
- How are customers benefiting through the current NEM arrangements by comparison with previous arrangements?
- When reliability standards are being proposed, how are pricing consequences considered?
- Do customers recognise changes in service quality have pricing implications and how could the link between prices and standards be made more transparent?
- The affordability for Tasmanian customers of the improved reliability standards imposed by the '101 communities' policy.

6. Value Considerations of Major Investments

- If a primary role of the TVPS is hydrological risk management, how should the full costs of the TVPS be funded over time?
- Stakeholder views on the trade off between the preservation of value of the TVPS asset and non-contestable customer prices.

7. Governance

- What could be done to improve transparency and accountability of decision making in the future, while recognising the need for appropriate protection of commercial interests?
- How stakeholders view the competing objectives commercial and broader Government policy objectives of SOEBs.