

8th September 2014

Energy Strategy Submissions
Department of State Growth
GPO Box 536
Hobart, Tasmania, 7001

Norske Skog Paper Mills Australia Limited is the only manufacturer of newsprint grades of paper in Australia operating the Albury Mill in NSW and the Boyer Mill in Tasmania. The company is part of Norske Skogindustrier ASA, a Norwegian based company, which manufactures newsprint and publication grade paper from 8 mills in 6 countries.

The Boyer Mill commenced operations in 1941, has over 300 employees onsite at its facility at Boyer, Tasmania and supports an estimated further 900 indirect jobs. The Mill contributes over \$165 million directly to the Tasmanian economy each year. Following the recent capital investment of \$85 million to convert one of the two paper machines to produce catalogue grades, the Mill has an annual production capacity of 290,000 tonnes split evenly between coated and un-coated production.

The Boyer Mill has a Wholesale Supply agreement with Hydro Tasmania, is directly connected to the TasNetworks 110kV transmission network and is the 4th largest consumer of electricity in the state. The Mill is the second largest consumer of Coal in Tasmania purchasing over 90,000t of Fingal Valley sub-bituminous coal for the production of steam and also purchases 60,000 GJ of liquid natural gas delivered in truck tankers onto the site for additional paper drying.

Norske Skog welcomes the opportunity to participate in the process to define an Energy Strategy for Tasmania. Our submission focusses on those areas that affect our operation more directly however some broader aspects of the Issues Paper are also discussed. Norske Skog would welcome the opportunity to discuss any aspects of this paper more directly with the Department.

Yours



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Sustainable Electricity Prices

Question 1 - What enhancements could be made to regulatory frameworks to ensure the right incentives for businesses and consumers are in place?

Question 2 - Given both the State and Commonwealth Government are committed to reducing red and green tape, and that the electricity market is highly regulated and complex, what opportunities are there to reduce or remove regulation?

The commercial and regulatory nature of electricity supply agreements are by nature complex and national and state regulatory frameworks have undergone some significant changes that have affected each level of the energy supply chain. A major stumbling block when dealing with the energy businesses in Australia is the complexity of the regulations (for example the National Electricity Rules). TasNetworks have a team of 5 employees specifically dedicated to regulation, and none of the Major Industrials can afford to either develop or carry that level of expertise in their organisations.

Fundamentally, we believe that it is not simply red or green tape but fundamental business governance and leadership working within a framework that determines the effectiveness of that framework.

Across the nation, and particularly in Tasmania electricity prices have increased dramatically on the back of regulated infrastructure spending. Much of this spending has been based on overly optimistic forecasts of increasing demand and the requirement to supply this demand. There has been little examination of alternative mechanisms to facilitate supply across the network. In particular, demand management can significantly reduce peak demand on networks and is quite clear that consumers have and will continue to respond to excessive electricity prices via behavioural change. This is evidenced in part by the significant reduction in demand across the National Electricity Market (NEM). There is an opportunity to provide incentives to consumers (small, medium and large) to modify their usage in such a way as to remove the requirement to unnecessarily upgrade the capacity of network assets.

Question 3 - Is retail competition important because of price, choice or for other reasons?

As a large contestable consumer we have nothing specific to add, but feel it is important to note that due to the structural relationships around Tasmanian generation and supply, there should be little expectation that Full Retail Competition for all consumers would be effective.

The 2012 Electricity Supply Industry Expert Panel report, “An Independent Review of the Tasmanian Electricity Industry – Final Report, 2012” indicated that the proposal (now implemented) to merge Aurora and Transend would only yield modest benefits:

“The overall conclusions arising from this work suggest that the benefits from integrating the two network businesses are modest and are unlikely to be sufficient, compared to the potential commercial disruption and risks, to suggest implementation as a stand-alone reform initiative.”

Unfortunately, the Tasmanian Government ignored the Expert Panels conclusion that:

“... implementation of its recommended reform package – in its entirety - is the only feasible way of overcoming the current structural obstacles to viable entry and meaningful rivalry in the wholesale and retail markets and promoting vigorous and sustainable retail competition and choice for all Tasmanian customers.”

Question 4 - What enhancements or additional information could increase the reporting transparency of the Government’s electricity businesses and contribute to improved efficiency?

We believe that open and transparent benchmarking of key business performance indicators would produce a significant change in focus of the Government Business Enterprise (GBE) management groups leading to efficiency improvements in the electricity businesses. The provision of Global benchmarking of Opex, Capex, Full Time Equivalents and other critical business performance metrics into the public domain would improve discourse and understanding of the performance of the individual businesses relative to the national and global sector as a whole.

Energy reliability

Question 6 - Would you consider accepting slightly lower levels of reliability if this resulted in materially lower prices?

Through the last two regulatory periods, the Boyer Mill has not raised electricity reliability as a commercial or production issue with our supplier, but we do and have expected detailed understanding and analysis of any outages that have occurred and a transparent, two-way reporting framework to facilitate that.

We believe that Government, Regulators and consumers should be demanding the same efficiency gains that modern businesses are expected to routinely achieve. This is the true measure of an efficient modern organisation modelling continuous improvement supported by a “wise” capital program. In parallel, the right mix of continuous improvement, effort and Capex programs can deliver businesses sustainable improvements in reliability, costs, service levels etc. To that end, the expectation should be that over time energy business should be able to provide the same level of reliability for lower prices as a matter of course.

Nationally, all consumers have experienced large increases in networks charges (our business experienced over 200% increase through the last regulatory period) due to

approved, regulated capital spend by Network Service Providers. However, we are expected to accept that it wasn't enough, or wasn't spent in the right areas and that even more is required to maintain services. Specifically in Tasmania, Renewal capital was overspent in the last regulatory period, particularly when compared to declining local demand, so shouldn't consumers rightfully expect prices to drop for the same level of service?

Broad Economic Development Opportunities

Question 5 - Do energy intensive and trade exposed businesses require greater future price certainty to maintain and/or grow their operations?

Question 10 - What role should Government play in attempting to retain and increase load growth in Tasmania and how should it do it?

Like other Energy Intensive – Trade Exposed (EITE) producers in Tasmania, Norske Skog has no capacity to pass on the significant price movements in essential services, such as energy, to our customers. Additional costs must be absorbed and offset where possible, often by reductions in workforce numbers and expenditure, most usually maintenance and capital. These have an immediate impact on the direct expenditure in Tasmania. A continuation of the recent history of price increase, particularly from TasNetworks, will threaten the ongoing viability of many of the large energy consumers in Tasmania. It should not be overlooked that by their very definition as EITE businesses, the Major Industrials in Tasmania are also Vulnerable Customer (Section 3 of the issues paper)

Operations such as Norske Skog provide an important base-load and efficiency of scale in the electricity network as well as providing critical network frequency management facility. The Major Industrials provide ongoing, constant demand that underpins an ongoing revenue stream to the government via Hydro and TasNetworks.

In the 2011 Expert Panel Review “An Independent Assessment of the Tasmanian Electricity Supply Industry, Dec 2011” modelling showed that

“a significant load reduction in Tasmania would lead to a loss of value to Hydro Tasmania, when compared to current and future contract prices” paid by large users.

Further,

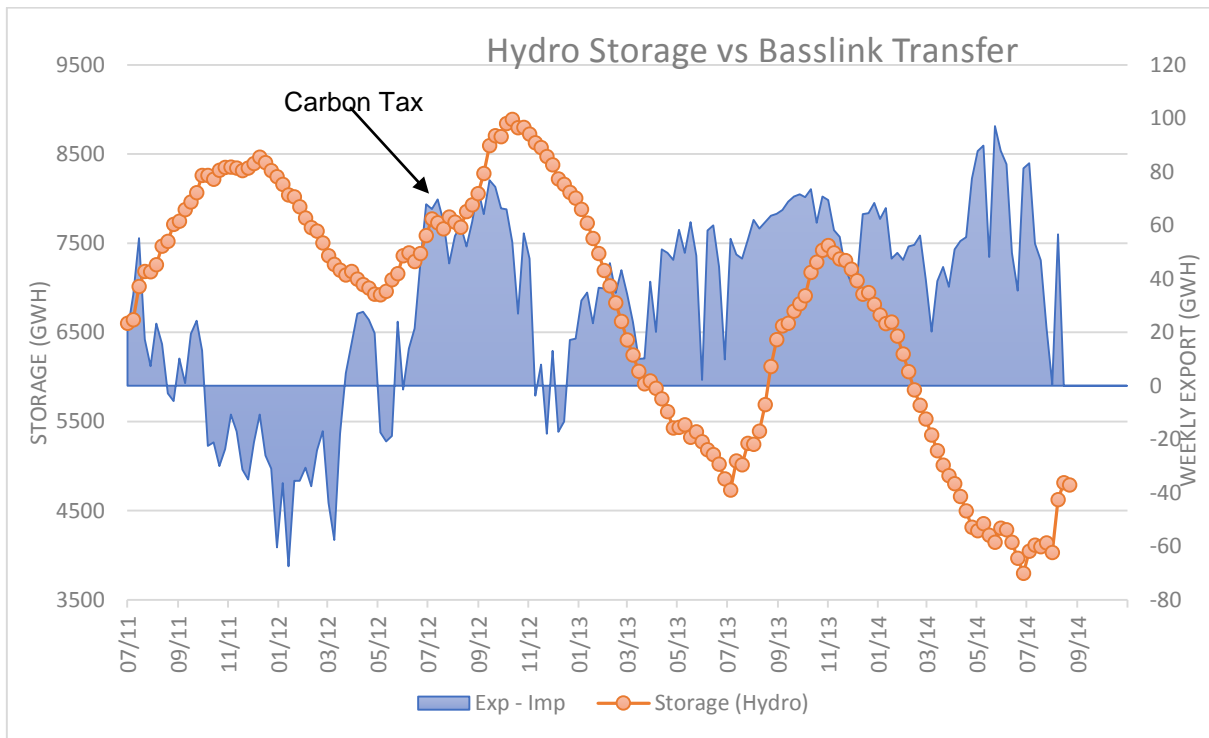
“if the amount of lost load was increased, the value lost by Hydro Tasmania would continue to increase”.

It is worth noting that on most days the export of energy via Basslink to Victoria has been constrained by the capacity of the interconnector. This further underlines the Expert Panel's assessment and impact of the potential revenue loss that the state would incur if a major industrial were to close. There would be no way for Hydro to sell any further excess

generation and it would therefore be a direct loss of revenue (at least until investment into a second interconnector could be undertaken and the asset installed/commissioned).

However, it should also be noted that due to falling national demand, the Australian Energy Market Operator (AEMO) is forecasting significant surplus capacity across the NEM over the next decade. This should result in downward pressure on electricity prices and further loss of revenue from energy exports across Basslink.

Basslink has exported over 300 MWh continuous load (3 times Norske Skog’s load) every day, averaging 50GWh/week to Victoria, since the introduction of the Carbon Price Mechanism (C-Tax). This export has continued and resulted in Hydro’s energy in storage falling to its lowest level since May 2009 despite significant rainfall and dam inflows when compared to the drought conditions preceding 2009. At a board and shareholder level therefore, there is obviously both the desire and capacity for both GBE’s, Hydro and TasNetworks, to generate/supply additional electricity to what is currently required within Tasmania.



What the state requires is domestic load growth by both retaining current demand and attracting new energy users. Based on recent data, Tasmania’s load is decreasing to levels not seen in a decade. The state has more than enough generation and transmission capacity – but it’s being used to power Victoria and the rest of the NEM.

It is important to note that the ratio of direct community benefit to electricity revenue from the Boyer Mill over the last decade is greater than 3:1. The extended community benefits that local utilisation of power brings to the overall Tasmanian economy are

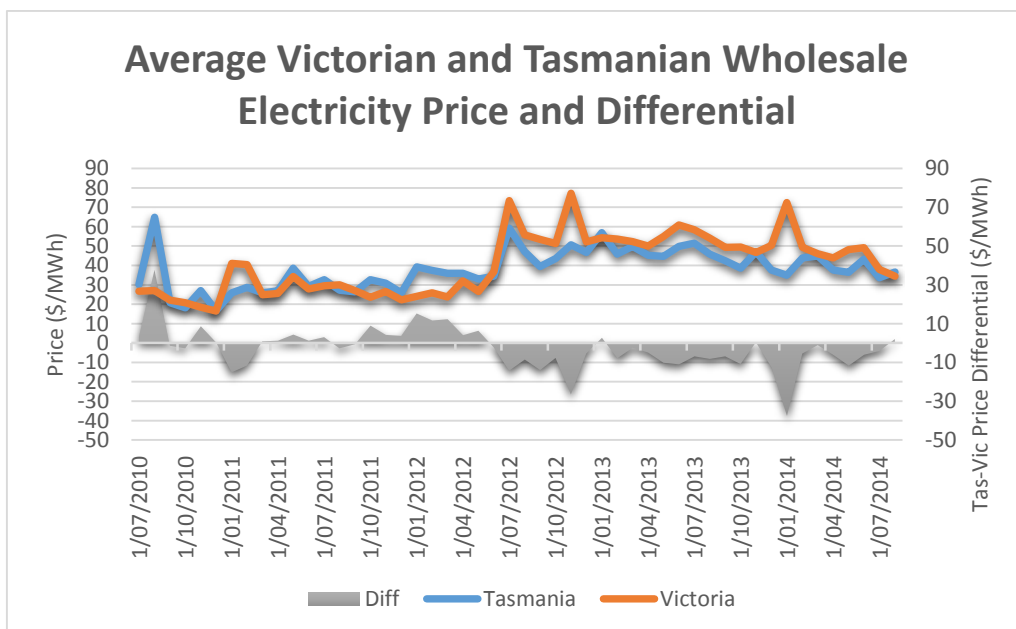
significant. The 4 biggest users of energy in Tasmania recently combined to form “The Big Picture” Industry Group with the aim to re-affirm and publicise the key role that the Major Industrials have and will play in the community at both an economic and social level.

As the major shareholder in generation and transmission, the Tasmanian Government is in the driving seat and has a clear opportunity to provide the best possible revenue and community development from the resource it has access to. As detailed by the Expert Panel, supporting existing and new major industrial load has benefits more far-reaching than the short-term revenue raising approach currently being undertaken.

Given Tasmania’s recent transmission profile it would be prudent to examine a second interconnector as an important infrastructure development. The Government have indicated that:

The Government has committed funding to advance the case for a nationally-funded second Bass Strait interconnector and the case for the expansion of Hydro Tasmania’s generation output by 10 per cent. (Government Services, Budget Paper No 2, Volume 1 2014).

To maintain profitable Basslink flows into Victoria a price differential of \$10/MWh needs to be maintained. However, post C-Tax we should expect to see Victorian wholesale prices drop back to near pre-carbon prices. This would remove that price signal for net export and in fact could reverse Basslink to an import only business model.



A second Interconnector could be an option if major industrial load in Tasmania diminishes, but a full analysis needs to be undertaken to determine if this will actually ensure long term local growth or just utilise Tasmanian assets to support mainland growth.

Wind & Gas

Question 11 - What further potential is there to develop renewable energy in Tasmania, including wind energy, given there is no unmet Tasmanian demand requiring additional generation for the foreseeable future?

Question 12 - Is there a further facilitation role for Government in gas roll-out, or should Government focus its efforts on examining the costs and benefits of improving minimum protections for gas customers?

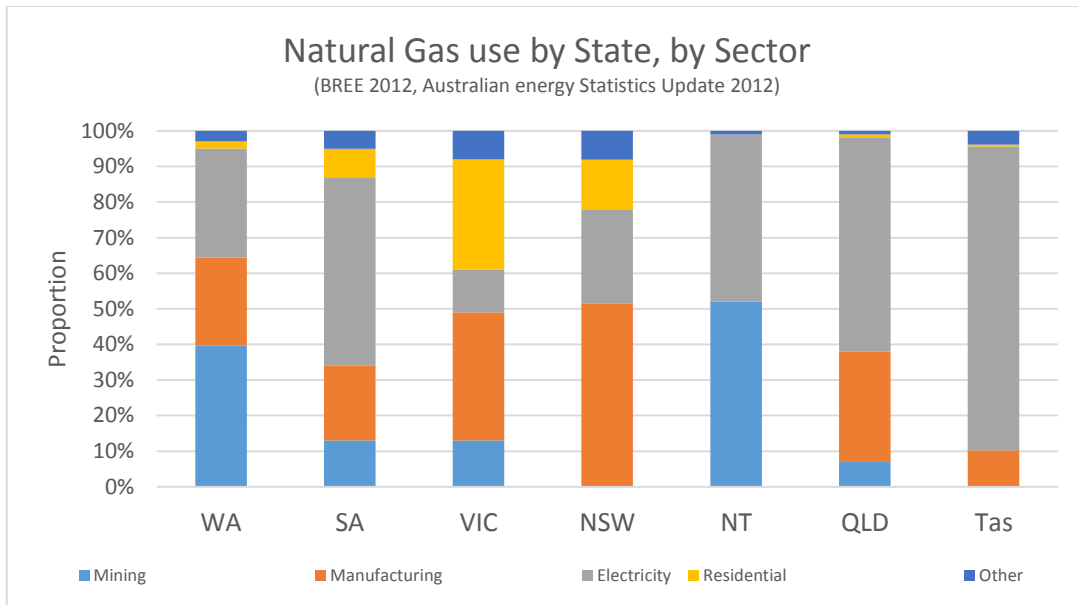
Without Government subsidies (such as the Renewable Energy Target, RET), wind power generators could not economically dispatch to the grid. Customers would be unlikely to accept power delivered 30% of the time (at best) as well as not knowing just when that power might be delivered. In the United States, where wind power is regarded as low cost, Congress has given a lucrative tax incentive to the wind industry - the federal Production Tax Credit (PTC) pays wind energy producers a \$23 premium for every Megawatt-hour generated during the first decade of a project's operation. Without this subsidy new wind farm projects stop as was seen at the end of 2012 when there was uncertainty over whether the scheme would continue.

Further, the subsidisation of wind-power has cost Spain significantly. A study by The University of Rey Juan Carlos (Study of the effects on employment of public aid to renewable energy sources, 2009) calculated that since 2000 Spain had given subsidies of more than €1 million per wind industry job and that each of these destroyed 2.2 jobs elsewhere in the economy. In fact, the report calculated that each megawatt of installed wind energy took away 4.27 jobs elsewhere in the economy. Similarly, Germany has spent over \$400 billion on subsidies for renewable energy over the last 20 years and yet households now pay the second highest rates for electricity in the EU – second only to Denmark, the world leader in wind turbines.

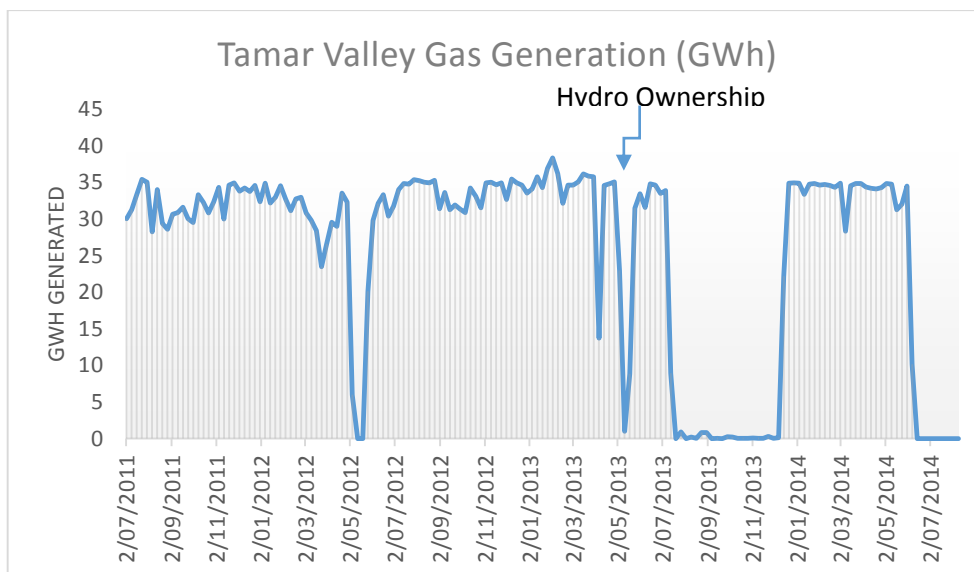
Notwithstanding the lack of necessity for additional generation capacity in Tasmania, wind-farm installation in Tasmania has been undertaken in areas remote from pre-existing infrastructure. This has required new infrastructure to allow connection to the current networks which increases prescribed network charges for consumers. In addition, AEMO has identified that increased wind generation brings with it operational impacts particularly around the control of power system frequency. TasNetworks have advised AEMO of the need for limits on the output of existing wind generation at Musselroe Bay, and on imports on the Basslink Interconnector to ensure that Rate of Change of Frequency (RoCoF) levels remain within acceptable limits in Tasmania. There have been a number of instances of tripping and load shedding experienced across grids in Europe during periods of high wind generation.

The recent Report of the Expert Panel into the RET (August 2014) may well have limited future increases in large-scale wind-generation, raising concerns over the economics of growth in this sector.

The profile of Natural Gas use in Tasmania is very different to all other mainland states. Proportionally, gas supplied to Tasmania Industrial use is the lowest of any state in Australia with the majority being used by Tamar Valley Power Station (TVPS). Hence, without appropriate safeguards there must be overall risk to Tasmanian supply due to any reduction in use or changes to underpinning supply contract to TVPS.



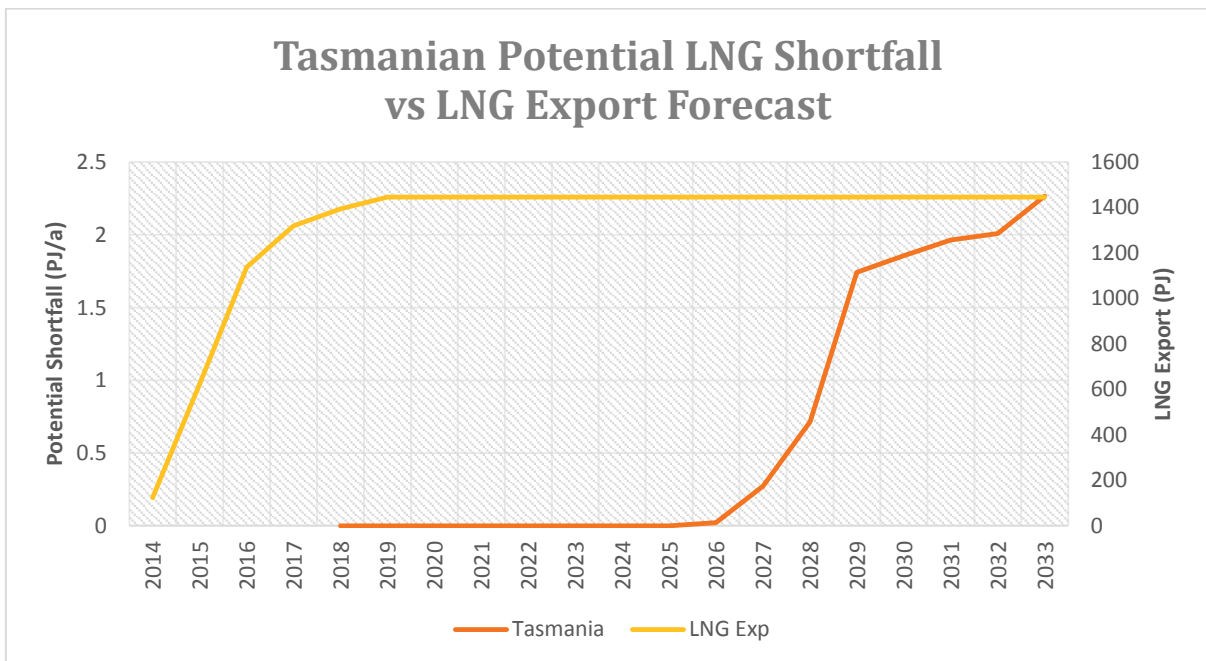
Only 20% of Tasmania's pipeline capacity is being used when TVPS is offline and the pipeline only ran at 35% capacity 2012/13. Further, the utilisation of TVPS has changed significantly since it was taken over by Hydro and it is clear that due to falling demand and recent rainfall there is little requirement to run the asset.



With Hydro’s contract for supply of gas to TVPS due for renewal in 2017, the potential for sale and/or closure of the asset would seem an option to be considered. Consequently, ongoing utilisation of the pipeline would be reduced and like electricity networks, infrastructure costs would be spread across all remaining consumers. Hence, closure of TVPS may preclude any further uptake by large industrials in the future due to price effects as well as imposing significant price increases on those already consuming gas.

Notwithstanding local effects on pricing, export demand versus local production is expected to begin to influence gas prices in Eastern Australia as early as 2015. Despite an initial over-supply as new production comes on-line, recent forecasts indicate an average Queensland gas prices of \$12/GJ 2015 to 2017 – triple the current wholesale price.

Further, without significant growth or uptake there may no longer be the economies of scale and price signals to facilitate ongoing gas usage in Tasmania. AEMO has forecast an optimistic 1.3% growth in utilisation by Tasmanian “large industrials” over the next 20 years and 2.7% per annum for residential and business consumers combined. Even if TVPS remains operational and increase its output by AEMO’s projection of 3.5% over the same period, Tasmania is not expected to experience any sort of supply constraints until post-2026.



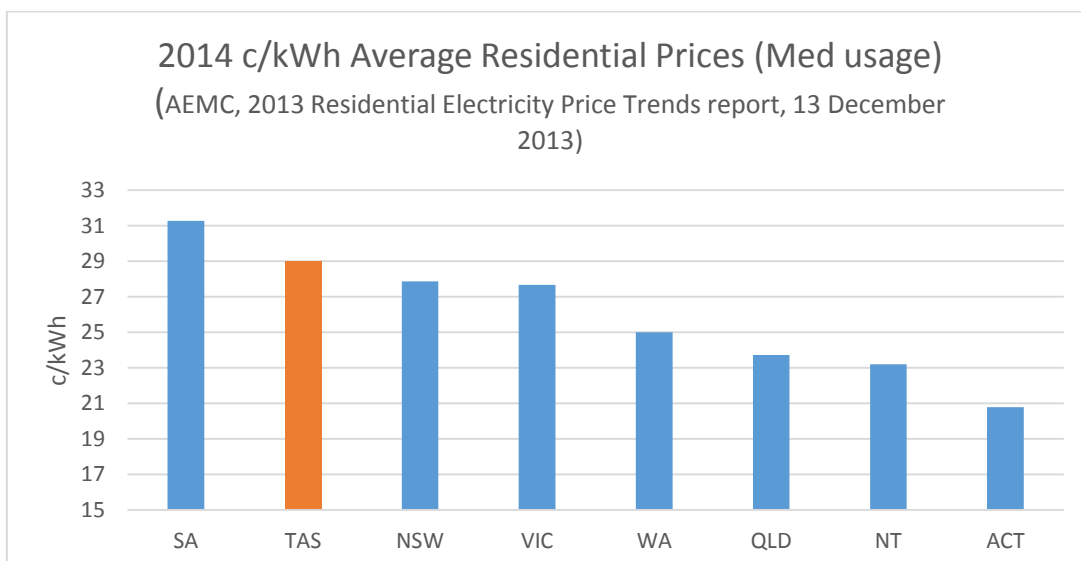
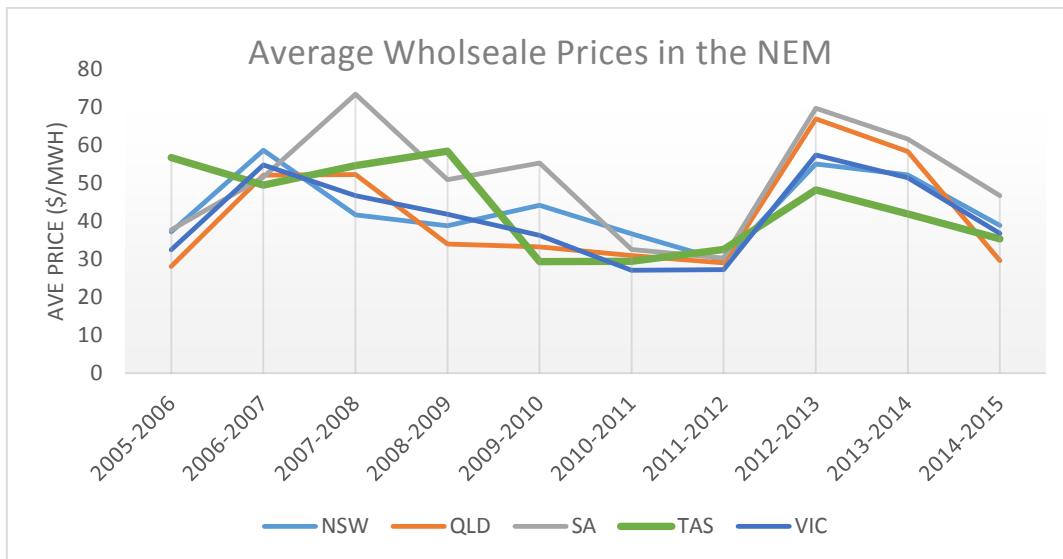
When viewed against the pressure that LNG exports may impose on the Eastern States of Australia, the potential exists for gas to become both price-prohibitive and effectively constrained much earlier than 2026. One would expect any long-term contract entered into post-2016 will have a base underpinned by export-parity price.

Opportunities

Question 13 - What are considered to be the key opportunities, and the key issues, associated with possible energy futures?

Question 14 - What could be some outcomes for the Tasmanian Energy Strategy, and what actions can Government, or energy providers and consumers, take to achieve them? How could success/performance be measured?

Given that there has been no major generation development (outside of wind) and hence no major Augmentation capital spend in Hydro generation since 1994 one might expect that Tasmania should already have the lowest wholesale electricity prices in Australia and that these should flow on to the consumer. This is clearly not the case as all consumers have felt the impact of network infrastructure spend through the last regulatory period.



As the major shareholder in both the generation and transmission businesses, the Government has the opportunity to balance the need for short-term revenue demands with a longer-term community, business and economic development.

In the recent Tasmanian 2014-15 budget announcement GBE's are now required to pay 90% of net profits after tax as a dividend each year and the Government will at the same time be actively

“working with Tasmanian Networks to ensure that those savings are returned to the Tasmanian community by way of reduced upwards pressure on electricity prices...”.

How this balance is to be achieved is yet to be seen, and in particular consumers at all levels will continue to expect actual price reductions not just reduced upward pressure on prices.

There is a clear opportunity for Tasmania to leverage off the natural resources it has already harnessed (Hydro-electricity) and provide baseline infrastructure support to energy consumers both large and small. Manufacturing has and will continue to have the capacity to form a foundation for growth in Tasmania and Australia. The economy of scale and broader community economic benefits that the provision of affordable power to both large industrials and smaller consumers should not be overlooked.

