

TAKE A LOOK AT

THE BIG PICTURE.

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21 November 2014

Committee Secretary
Senate Standing Committees on Environment and Communications
PO Box 6100
Parliament House
Canberra ACT 2600
ec.sen@aph.gov.au

Dear Sir/ Madam

Re: Inquiry into the performance and management of electricity network companies

The **Big Picture Tasmania** companies are pleased to have the opportunity to contribute to this Senate Enquiry.

By way of background the Tasmanian **Big Picture** companies represent the largest energy intensive employers in Tasmania. In aggregate these businesses contribute approximately \$2.5 billion in value add to Gross State Product and directly and indirectly employ in excess of 10,000 people. These businesses in aggregate contribute approximately 40 percent of the Tasmanian transmission network business's revenue which in the National Electricity Market is a unique situation in terms of revenue composition. These businesses are directly connected to the high voltage network and contribute to base load stability for the network making them a critical element of the transmission system with respect to reliability and costs to users in general. These businesses are not exempt, nor do they receive prudent discounts under the National Electricity Rules (NER).

However, since 2008 transmission costs have effectively doubled for these businesses (Figure 1). The actual results over the last determination period, in terms of charges to consumer and demand, clearly demonstrate the decisions taken / allowed for have undermined Tasmania's economic and social security. Allowing this perverse situation to continue without significant reform by Federal and State Governments is bordering on neglect. The following submission will outline some of the core issues that have led to this situation which continues to harm end users.

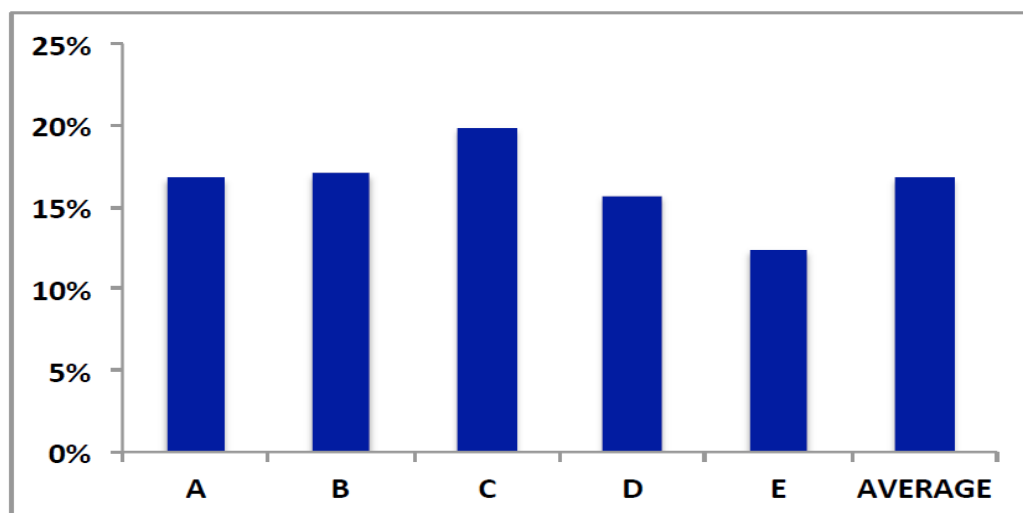


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Figure 1: Compound annual growth rates in transmission charges paid by the largest energy users in Tasmania from 2007 from 2012



The Propose/Respond Model

Under the current NER, transmission businesses propose revenue proposals and the onus is on the Australian Energy Regulator (AER) to disprove and challenge proposals. Network businesses tend to exploit this model by always initially proposing higher revenue than the efficient level. The AER and other users are always in a weaker position through this process given the starting position of the network companies, which frames the discussion. This regulatory 'game' between network business and the AER is an inefficient process that leads to higher revenue than ought to be allowed. It should be noted that the AER process results in a Maximum Allowable Revenue (MAR) that the network can charge. This is distinct from what the network business *should* charge its customers.

Information Asymmetry

The network businesses will always have much more information available to them than either the AER or their customers can access. This means that the network business are in a superior position to argue with the AER over what capex and opex the business considers is needed.

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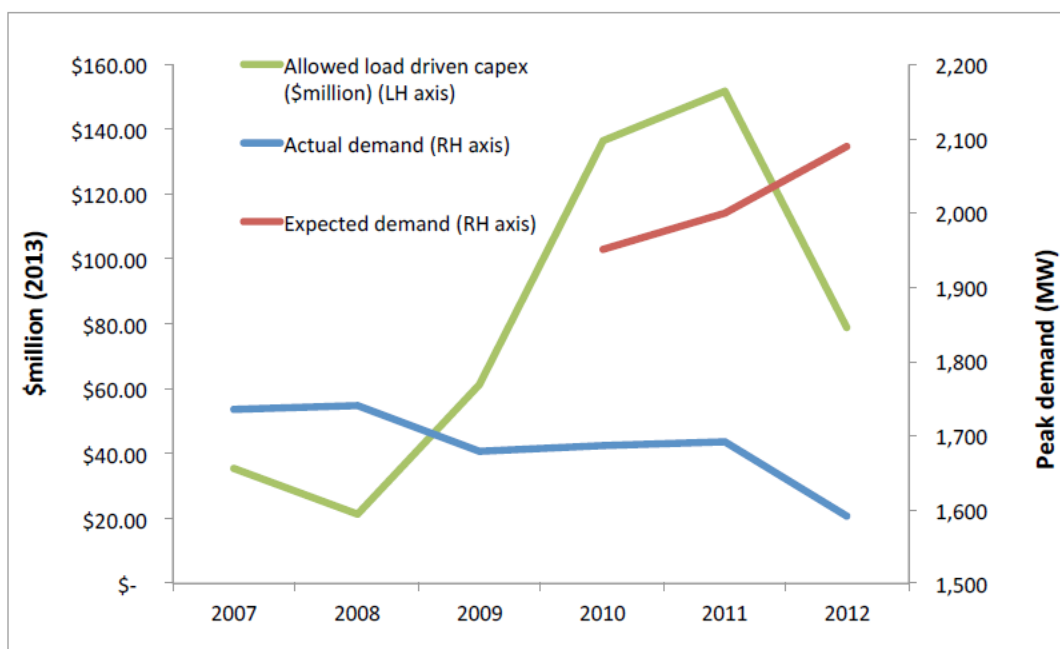
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Operational and Capital Expenditure (Opex and Capex)

The operational and capital expenditures are required to be efficient in revenue proposals by network companies. Evidence suggests that this does not occur and the network business will include capital

projects that are not needed, grossly overestimated or driven by flawed peak demand projections (Figure 2). Furthermore, as capex has a direct correlation with the size of the asset base there is always an incentive to increase capital to maximize the resultant returns from the business.

Figure 2: Load driven capex and expected and actual demand for Tasmanian region



It is also unclear whether the network companies adopt prudent capital productivity standards and best practice capital management approaches to their programs. For instance, ‘thinking out capital problems’ or ‘non-capex’ solutions is not a normal response by these businesses that view capital as ‘unlimited’. The situation in the Tasmanian jurisdiction is a stark example in that expected Maximum Demand was 2100MW but actual demand was only 1600MW. This gap is equivalent to two or three large energy consuming manufacturing plants or a near doubling of the Tasmanian population to 800,000 people.

Similarly, operational expenditures are not critically challenged by the network business, as the network business sees these costs as being passed through to consumers. The AER is required to



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challenge these expenditures but in the absence of detailed information and benchmarking data on efficient capex and costs the AER cannot effectively control the size of capex and opex allowable.

Asset Valuation

The regulatory asset base (RAB) is the single biggest driver of revenue for a transmission business. The approach in the NER for asset valuation provides for automatic inclusion of any investment made by a network business. The NER thereby create an incentive to invest and as such the network businesses use this lever to over-invest. This is compounded with the propose /respond regulatory model where revenue proposals and capital expenditure are more often than not inflated.

In 2005, Tasmania had an asset base of approximately \$0.8bn (in 2013\$) with a peak demand of approximately 1700MW, in 2012, Tasmania has an asset base of \$1.5bn (in 2013\$) dispensing a peak demand 100MW lower and where reliability has deteriorated over the 5 years (Refer Appendix 3). Any private enterprise delivering an equivalent outcome would most likely see its Board of Directors and CEO face hostile shareholders and possible legal action. Since that time asset values have soared on the back of substantial over investment in the network (Figure 3). For instance, in Tasmania in the last revenue reset period ~\$600 million in capex was spent by Transend at a time when demand and peak demand was declining. These asset values were assessed using the Depreciated Optimized Replacement Cost (DORC) valuation approach which has been recently publicly discredited as a flawed methodology, as it overstates the value of the assets. In contrast, competitive industry uses the Depreciated Actual Cost (DAC) valuation approach which delivers a much lower asset valuation. Under this approach as demand projections have not eventuated and consequently the network is under-utilized the asset value would be revalued downwards accordingly to reflect the impairment in value of the business.

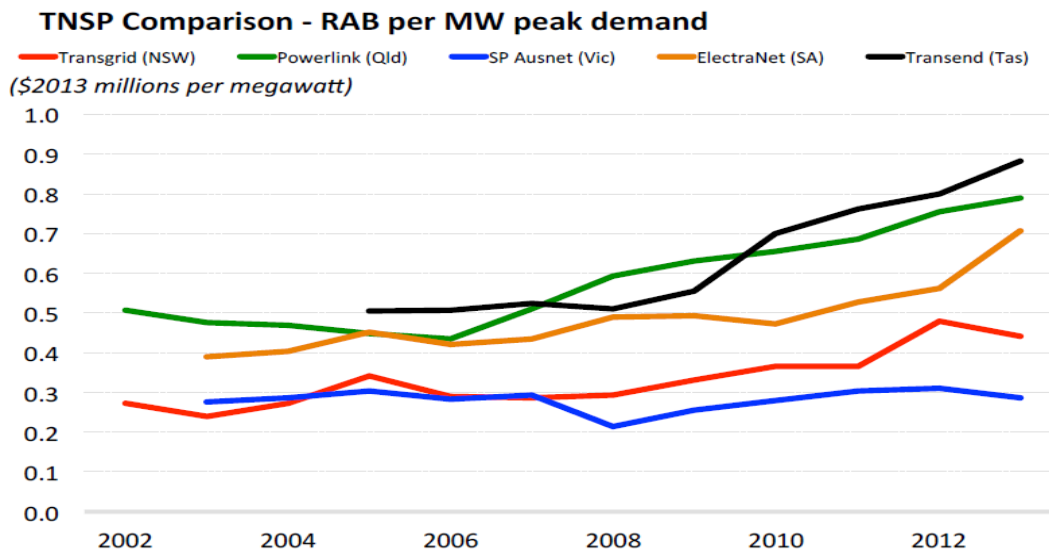
Figure 3: RAB per MW of peak demand for selected TNSPs



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Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is effectively driven by three basic assessments - the return on equity, the cost of debt and the gearing i.e. ratio between debt and equity. Network businesses are extraordinarily profitable entities earning rates of return in some cases greater than businesses in competitive markets. Revenue for Transmission Network Service Providers (TNSPs) has substantially grown since 2006, driven by the large valuations for these businesses but also by the generous rates of return allowable under the NER (see Figure 4). For Government owned businesses they provide significant returns by way of dividends to the States in which they operate. The returns are largely driven by the value of the asset base and the regulatory return allowed under the NER.

While the Big Picture companies agree businesses should be profitable so they can reinvest prudently, empirical evidence suggests the objectives of the NER are not being met and the quantum of profitability of network businesses has become unbalanced in favour of the shareholders to the detriment of consumers.

Figure 4: Revenue per MWhr transmitted for selected TNSPs



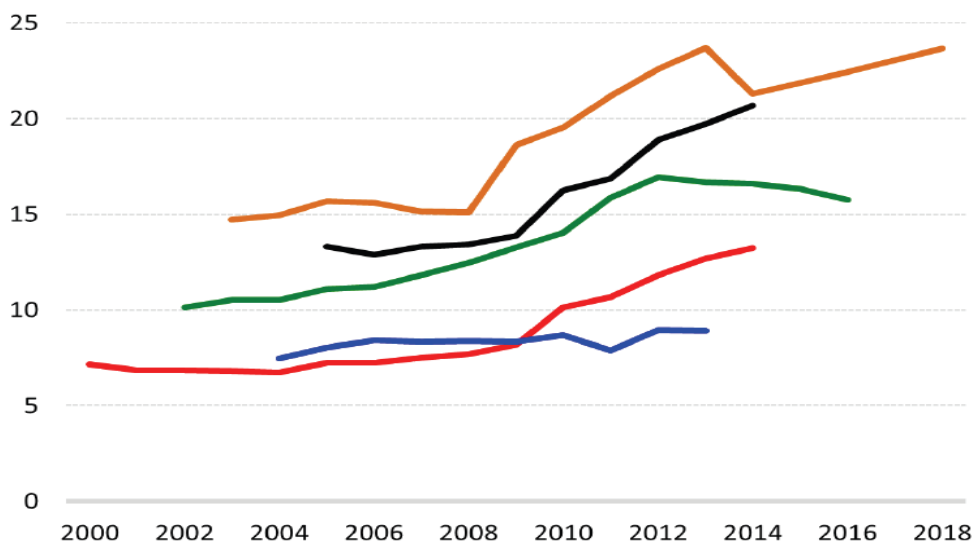
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TNSP Comparison - Revenue per MWh

— Transgrid (NSW) — Powerlink (Qld) — SP Ausnet (Vic) — ElectraNet (SA) — Transend (Tas)
(\$2013 dollars per megawatt hour)



Return on Equity (RoE)

The NER allow a number of approaches to be used to assess the cost of equity which means network businesses seek an outcome that results in the highest cost. The RoE is always set higher by the network business by using the upper end of the RoE parameter estimate ranges.

While this is permitted under the NER there is no assessment of the reasonableness and equity of these returns especially as the network businesses do not operate in competitive markets and have substantially lower risk profiles than firms operating in competitive markets.

Cost of Debt

The network businesses use benchmark cost of debt for an entity based on BBB+ bond yields. This approach is flawed as the actual cost of debt that a network business incurs should be used, rather than an artificial assessment of what the cost of debt might be at some time in the future. A Government owned business is able to access debt financing at rates cheaper than what the NER require, thereby locking in a premium for the cost of debt to the detriment of users. While some would argue that cost of debt should be based on arms-length basis on market terms the NER is too conservative with respect to this and fails to take into account the context that these businesses operate in.

Gearing



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The AER guidelines reflect a lower gearing than is seen by the performance of the network businesses. This lower gearing results in consumers paying a premium for the WACC as debt is sourced at a lower cost than providing equity as it has a lower risk profile.

The Big Picture Tasmania companies welcome this Senate Inquiry and would be pleased to discuss our submission in further detail with the Senate Committee.

