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To the Electricity Supply Industry Expert Panel
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**Independent Review of the Tasmanian Electricity Sector
Issues Paper**

Thank you for the opportunity of commenting on the Issues Paper arising from the Independent Review of the Tasmanian Electricity Sector.

My comments are restricted to residential (non-contestable) issues. I will argue the case for minimum quarterly charges to replace the fixed quarterly charges now in place. The fixed charge approach penalises those that invest in low energy appliances or adopt other energy efficiency measures. The minimum quarterly charge is more equitable, it is consistent with government policy on sustainable energy supply and it is not a barrier to reducing Tasmania's greenhouse gas emissions.

The fixed charges applying to residential electricity customers in Tasmania from 1 July 2011 are: Tariff 31- 89.145c/day; Tariff 41 – 17.266c/day; Tariff 42 – 17.266c/day; Tariff 61 – 21.878c/day; Tariff 62 – 21.878c/day. It is common for households to use two tariffs meaning fixed charges are around \$388 to \$405 per year.

Inconsistencies in fixed tariffs

The fixed charges are, presumably, intended to be a contribution towards infrastructure and meter reading costs by all residential customers connected to the grid. If this is the case, it seems difficult to justify higher fixed charges for off-peak tariffs (61 and 62) than for the heating Discount tariff (42). Surely tariff 42 users impart greater infrastructure costs on the grid than off-peak users. Why then is the fixed charge for off-peak 27% higher than for the heating tariff?

Fixed charges penalise efforts at improving end-use efficiency

I will use my own home as an example of the energy efficiency barriers imposed by high fixed charges for electricity. On my most recent Aurora account I paid 33.1c/kWh for my electricity (total use 597kWh or 6.42kWh/day with a total bill of \$197.42). The fixed charges made up 45% of this bill. If I further reduce my residential electricity use I would save 22.6c/kWh (pre-July 2011 price) and if I reduce my hot water use or major space heating I would save 15.6c/kWh (again pre-July 2011 price). Working on a simple 5-year payback as my economic justification for making electricity savings I might invest \$412 to save 1kWh/day based on the present tariff structure, but I could justify a \$604 investment if I saved at my average cost of electricity (almost 50% more). In the case of hot water or space-heating savings the difference is more dramatic. On present tariffs I might invest \$285 to reduce electricity use by 1kWh per day rather than the \$604 I could justify if I saved at my average electricity cost (i.e. I could justify spending more than twice as much adding

insulation to my home). As my home becomes more energy efficient the average price I pay for electricity increases significantly.

Minimum quarterly electricity charge rather than a fixed charge

There is no doubt that there are infrastructure costs and service costs associated with each residential customer. If there was no fixed charge the majority of residential customers would have to subsidise the customers that used no, or very little, electricity in a quarter. For this reason, a minimum electricity charge seems reasonable, although a case for no minimum charge could be made on environmental grounds.

If the minimum daily charge was similar to the present fixed charge it would mean that customers would be paying for this minimum charge with the first 2 or 3kWh of electricity used each day.

Is a fixed charge approach really justified? Some arguments in favour of a fixed charge justify this approach because infrastructure costs are of the order of half the final electricity cost (as illustrated in Figure 2 of the Issues Paper). This is a fallacious argument because the infrastructure is there to deliver the product – electricity. If a consumer uses more, then more infrastructure is required; so it is logical to include all costs in a single charge for the electricity used. Imagine if every time you pulled into a petrol station you had to first pay \$10 before purchasing any petrol in order to cover the cost of the garage and all the petroleum industry infrastructure regardless of whether you wanted a few litres or 100 litres – introducing such a system would cause outrage.

Part of the reason other retailers do not have a separate fixed charge for their products is competition. If a shop owner asked customers for a few dollars just to walk into the shop whether they bought anything or not they would soon go out of business. But Aurora is a monopoly supplier, so customers either do without electricity or accept the fixed costs. Personally, I would rather see Aurora do away with the fixed costs and remain a monopoly than bring in contestable supply for residential customers because I suspect total electricity costs would go up with contestable supply due to duplication of service for such a small customer base. But this is a whole new argument and will not be pursued here.

Removal of fixed charges would mean higher energy charges

Obviously, if fixed charges are removed the cost per kWh for electrical energy would have to increase if Aurora is to meet all its costs. A minimum quarterly charge at roughly the same magnitude as the present fixed charges would only recover a small fraction of the income now returned from the fixed charge (I assume this is the case but I do not have access to the billing data to calculate a precise figure).

To gain some idea of the change that would be required if there was a move from fixed charges to minimum charges and the change is to be cost neutral to Aurora I will assume the average residential customer uses 10,000kWh/year (a number published by Aurora on its website). I further assume, for the sake of this argument, this is split evenly between the residential tariff and the heating discount tariff. The total annual electricity cost based on current tariffs would be \$2403.25, of which \$388.80 would be the fixed charges. To recover the fixed costs for this hypothetical average household the cost per kWh would have to rise 3.89 cents (an increase of 15% in energy charges for tariff 31 and 26% for tariff 42, but this mix of increases in tariff 31 – 42 could easily be adjusted for various social reasons). These increases are similar to increases experienced in the past few years – the big difference is that the fixed charges would be removed. If the average household consumption is used to develop a ‘no fixed cost’ tariff structure then all households using less than the average

would be slightly better off and those using more than the average would be slightly worse off.

Some might argue that adopting a tariff structure with no fixed costs would disadvantage large electricity users; this is true. However, the present tariff structure disadvantages smaller electricity users. There are plenty of low income families and pensioners in the low energy use group – all of them are presently disadvantaged.

Energy efficiency and sustainable energy supply

On page 4 of the Issues Paper it states that the objective of any reforms is to promote an 'efficient and sustainable electricity supply industry'. Presumably an efficient and sustainable energy end-user is also desirable. Certainly, the State Government advocates energy efficiency for a whole suite of reasons.

The present residential tariff structure with fixed charges discourages investment in improved efficiency of electricity use in the home because as households becomes more efficient the average price paid per kWh increases.

Each kWh saved by a householder in Tasmania frees up one kWh to be sold into the national grid (or means one less kWh of coal fired electricity imported to Tasmania). Surely this is consistent with the Government's economic and environmental goals. Any measure to encourage cost-effective private investment to improve energy efficiency should be adopted.



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