Australian Air Quality Group Submission
Select Committee on Electricity Prices

Much of what we would like to say about the electricity prices has already been noted in a 2-part investigation by Ellen Fanning: http://www.theglobalmail.org/feature/the-hidden-cost-of-infinite-energy-part-1/19/

This report explains: "*The main culprit driving up electricity bills is this: In the five years to 2015, $46 billion will be spent on upgrading and extending Australia's electricity network to cope with our ever-growing power needs. The cost of all this is being charged back to all households, businesses and industries through their power bills, locking in average annual electricity price increases of more than 10 per cent a year till 2014*."

A media release in 2011 on the Australian Consumers' association website, in relation to IPART's decision to confirm NSW energy price rises of 17.3%, makes the same point:

"At the moment, our energy networks have much greater incentives to keep expanding and pass on the costs to consumers rather than reduce demand".
"Yet there is clear evidence that action to cut demand, including through energy efficiency, can avoid network expansion and reduce costs for households. For every dollar spent on cutting demand, this could save more than two dollars being spent unnecessarily on network infrastructure costs" - http://www.choice.com.au/media-and-news/media-releases/2011%20media%20releases/high-price-to-pay-for-energy-demand.aspx

In other words, the current regulatory system is nothing short of madness!!!

Given the twin imperatives of reducing global warming and controlling costs, the Senate Enquiry must determine how best to meet consumers' needs by putting appropriate controls into place to ensure that such stupid decisions to favour expensive infrastructure over energy efficiency will cease and never be repeated.

Ellen Fanning's article talks about peak load that happens a handful of times each summer — sometimes for only 40 hours a year … but that ''the cost of building the extra capacity necessary to deal with those few hours every year is enormous. Federal Energy Minister Martin Ferguson has taken to including in every speech on this issue the following startling statistic: Every time someone in Australia installs a $1,500 air conditioning system, it costs $7,000 to upgrade the electricity network to make sure there's enough capacity to run that system on the hottest summer day."

If this it the case, substantial savings could perhaps be achieved by encouraging the installation of small-scale solar PV units, for which peak generation times coincide with peak airconditioning loads, offsetting the need for additional expensive infrastructure to ensure the capacity to run that system on the hottest summer day.

Part 2 of Ellen Fanning article has a recommendation to help solve this problem:
"*it would simply require the Australian Energy Market Commission - the rulemaker for national energy markets - to copy and paste the UK regulations and sign off on them, without the need for legislation or lengthy consultations with state governments, creating a whole new secondary market for efficient, green power*."

If this works, as seems to be the case in the UK, the sooner the changes are made, the better. Sensible rules that encourage energy conservation will save consumers a lot of money by avoiding expensive infrastructure costs.

Electricity companies should therefore be rewarded for not imposing additional loads on the distribution system. Companies that encourage energy efficiency will have consumers with lower average annual electricity consumption, and lower demands at peak times. These companies should pay reduced network charges compared to companies that are not achieving the same efficiency gains. This would provide a valuable incentive for companies to promote energy efficiency measures and reduce peak demands, e.g. by time of use metering and increased payments for power generated from household PV cells.

The Senate Enquiry should also consider whether a regulated tariff for PV generation, equal to the current rate charged by electricity companies, would represent a fairer system. Other regulations, such as abolishing standing charges so that infrastructure charges are levied according to consumption might also better represent the long-term interest of the majority of electricity users.

The example in Ellen Fanning's article of the Rooty Hill RSL club's initiative to spend $4.5 million on trigeneration system, which started producing all the club's daytime power in November 2010. The rewards appear to be huge - without it, the club's annual electricity bill would be approaching $2.5 million, rather than the $746,000 they paid last year for the off-peak electricity drawn from the grid, only at night.

These examples demonstrate the failure of the current regulation system to meet what should be its two most important aims – to reducing global warming and controlling costs. The Senate Enquiry should therefore devise new regulations that will meet those needs.

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