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The Department of the Environment and Energy
Equipment Energy Efficiency Program

To whom it may concern,

I am writing in support of the introduction of Mandatory Energy Efficiency Labelling and MEPS at a level of 5.5 stars. From an economic and environmental perspective, the consultation document clearly shows that this proposal has excellent overall economic benefit, especially to consumers, as well as having the largest potential for CO₂ emissions reduction.

Given the enormous global challenge of climate change, a measure such as Mandatory Energy Efficiency Labelling and MEPS for swimming pool pumps is an excellent opportunity to save money and reduce emissions and should be fully supported. Any issues surrounding industry transition to accommodate this proposal should of course be considered. However the potential benefits of two speed or multi-speed pumps have been known for over 20 years with early work in this space carried out by electricity utilities in California¹ as well as studies in Australia².

The move towards low energy pool pump systems made economic sense over 20 years ago and is now even more cost effective given the increase in electricity process, especially in Australia since 2008. Note that these price increases were primarily driven by peak power demands and subsequent expenditure on poles and wires. It has been well known that pool pumps are a major driver of peak electricity demand as well as annual electricity demand in

¹ Springer, D and Rohe, F. (1996) Field Studies of Two-Speed and PV-Powered Pumps and Advanced Controls for Swimming Pools, ACEEE Summer Study on Energy Efficiency in Buildings "Profiting from Energy Efficiency", 1996, pp. 1.217 – 1.223.

² Sproul, A.B. "Design of PV Powered, High Efficiency Pool Pump Systems", ANZSES Conference, Dunedin, Nov. 2005

Australia – a fact that has been well documented in the consultation document and confirmed by recent studies^{3,4}. A further economic bonus of introducing more efficient pool pumping systems would be a reduction in peak demand – with ensuing economic benefits for both utilities and customers. Again this point has been discussed in the consultation document however the economic benefit was not included in the economic calculations.

In conclusion I strongly support the introduction of Mandatory Energy Efficiency Labelling and MEPS at a level of 5.5 stars. This would be a responsible move that would deliver economic benefits to Australian swimming pool owners, as well as electricity utilities in reducing peak demand. Further, given the enormous potential to reduce CO₂ emissions such a measure should be pursued for the long term environmental benefit that it can deliver.

Yours sincerely,



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³ Fan, H., I. F. MacGill, and A. B. Sproul. "Statistical Analysis of Drivers of residential peak electricity demand" paper submitted to *Energy and Buildings*

⁴ Fan, H., I. F. MacGill, and A. B. Sproul. "Statistical analysis of driving factors of residential energy demand in the greater Sydney region, Australia." *Energy and Buildings* 105 (2015): 9-25