



18th August 2017

Australian Energy Regulator
23 Marcus Clarke St
Canberra 2601

Dear AER,

I represent a swimming pool supplier, Sunbather, who has been supplying the pool industry with energy efficient products since 1974, and have seen this industry grow significantly to the c\$1.3m pools Australians currently enjoy in their back yards. As an energy conservation company at our core I strongly support rational energy initiatives and innovations to reduce energy consumption not only with pools, but with homes and industry. I spend a lot of time talking to and educating our industry on the future direction of energy as it is changing rapidly, now more than ever.

Our industry is for the most part little understood by outsiders and regulatory bodies as data and information is difficult to source. In reference to your subject matter, swimming pool equipment has advanced rapidly and there are no records or regulations requiring companies/manufacturers to register equipment installed or its energy consumption.

The discussion surrounding the switching off pool pumps is a good start on reducing energy, however the risk of poor water quality if pool pumps are turned off is a real one, and will be difficult to monitor remotely not knowing whether a pool has received its required circulation & sanitization time. Personally, I'm not convinced that turning off pool pumps is the right area to be looking as the average pool pump (1-1.5Hp) consumes only 0.75 – 1.0kwh of energy, which is not that significant when compared to other equipment items. Pool filter pump energy efficiency has improved markedly in previous years thanks to innovative manufacturers, in particular with variable speed pump technology which in Australia has a very successful uptake. When analyzing swimming pool energy, the immediate focus tends to be on pool pumps which filter the water, however there is more at play. In fact, the major area of energy consumption is that of heating the water which requires approximately 3,500 times more energy to heat than air, so over 80% of a pools energy requirement is to heat it. There are 3 common ways of heating a pool; solar, gas or electric heat pumps. Solar is of course a free energy source and therefore the most popular, gas is 'generally' used to heat spas/pools on demand, yet electric heat pumps are all too often used (approx 6000 sold in Aus per yr according to manufacturers) as a primary heater for a pool. In an energy crisis this does not make common sense, financial sense, or efficiency sense. A common size domestic heat pump draws between 3 - 5kwh and they often run 24/7 just to keep a pool warm so they are very large energy consumers. In many cases, electric heat pumps are the largest energy consuming device installed in a home. This has occurred because there is little regulation imposed on the design or installation of the product. 3 -5kwh is far more energy consumed than a pool pump and points to the heating of pool water requiring greater attention from energy regulators if there is to be a material impact/improvement on swimming pool energy savings which poses no risk to water quality or backyard pool usage.

Although slightly tangential to the AER's request for feedback, the purpose for this letter is simply to create awareness surrounding what is potentially a much bigger energy saver within our industry than turning off pool pumps periodically. Our company vision is to see greater energy awareness surrounding pool heating leading to more responsible and sustainable decisions and product choices to heat backyard pools by consumers, particularly given the energy crisis we all face. And of course, we aim to ensure that any future regulations imposed on this industry are those of common sense design allowing us to keep such a wonderful industry strong and sustainable putting more Australians in backyard pools.

Sincerely,

Tom Boadle | General Manager | Sunbather Pty Ltd