20 December 2016

To whom it may concern

The respective teams at Wave Swell Energy (WSE) and the marine renewable energy research group at the Australian Maritime College (AMC), a specialist institute of the University of Tasmania, have proactively collaborated for over a decade. During this period the WSE technology has been extensively tested and optimised by performing many comprehensive series of physical scale model experiments in the AMC ocean wave basin at Launceston, Tasmania. The most recent test session was performed in early September 2016. This included a comparison of the company's innovative new unidirectional OWC valve system with a standard non-valve bidirectional OWC system.

The results of the testing of the WSE technology and the subsequent analysis of these results in Sydney indicate the valve system increases the output of the technology (all other things being equal) by approximately 17%. In addition, earlier testing by AMC on the same OWC geometry indicates that a surface piercing lip entry to the OWC increases the output by approximately 20% compared to the simple entry geometry employed in most previous OWC technologies. When operating concurrently, these two innovations result in a combined improvement of around 40%.

These latest experiments provide conclusive proof of concept for the new unidirectional OWC valve system, which results in further benefits by permitting the adoption of a unidirectional turbine. The company's own estimates for the increased efficiency of its new unidirectional turbine, compared to a bidirectional turbine - a reportedly conservative 14% - would, with all three innovations employed together, result in a compounded improvement in output of approximately 60% over that of previous bidirectional OWC systems.

Preparations are presently underway for a further series of physical model experiments to be performed early in 2017 that incorporate each of the latest improvements in the design of WSE's first commercial-scale device that will be deployed in southern Australia.

Our long-term collaboration has benefited both parties: not only has it resulted in significant advancement in WSE's technology, but also many other achievements, such as the development of novel measurement and experimental techniques. These successes have been recognised in the scientific community through peer-reviewed articles co-authored by key AMC and WSE personnel, including Chief Executive Officer Dr Tom Denniss, and Chief Technology Officer Scott Hunter. For example, our joint work has been published/presented in the following prestigious international scientific journals and conferences: *Journal of Ocean*

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Engineering; *Journal of Offshore Mechanics and Arctic Engineering*; *Journal of Ocean Technology*; *Journal of Engineering for the Maritime Environment*, *Proceedings of the ASME 30th International Conference on Ocean, Offshore and Arctic Engineering*, and *Proceedings of the 18th Australasian Fluid Mechanics Conference*.

Finally, I personally have had the relatively unique experience of having direct involvement in assessing the performance of a large number and wide range of different marine renewable energy technologies, including over 12 different ocean wave energy devices from around the world. There is no question in my mind that WSE's technology is among the best, if not the best, in all key operational aspects such as efficiency, performance and survivability.

Please do not hesitate to contact me on +61 (0)419 543 918 or email gregorm@amc.edu.au should you wish any further information.

Yours sincerely

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