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To whom it may concern

Re the ART Turbine

I have reviewed the ART turbine concept, and in 25 years working on the design of cross flow turbines, both wind turbines and water turbines, during which time I have lodged several patent specifications, this is one of the few original designs I have seen that offers substantial improvements on the current state of the art.

I have exchanged many long, intellectually stimulating emails with the inventor, Drew Rokeby-Thomas, and have visited his workshop and seen his prototypes and test rig. He is an extraordinarily creative lateral thinker, aware of a vast range of innovative technologies relevant to his cross flow turbine work, and he also has the practical hands-on skills to build and test small prototypes.

He has followed several developments based on the original Savonius or S rotor concept and come up with a design concept which combines the advantages of the best of them, and then takes the concept one step further. Based on work done by Rahai at the University of California and Drew's own prototype tests, it appears that he can achieve efficiencies around 45%, more than double the efficiency of the original Savonius rotor and very good by any measure, since the theoretical maximum efficiency is 59.3%. His design overcomes several problems of concern to designers of tidal and river current turbines, namely

- self starting
- vibration due to torque and radial force fluctuations
- cavitation
- clogging with floating weed etc

It also has potential as a wind turbine, and its elegant appearance could make it an attractive feature for urban environments.

I understand he has lodged a patent specification on this concept, and I wish him well with the difficult task of raising the necessary investment capital to commercialise this design.

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