

Momentum builds for vortex energy

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THE campaign by Melbourne lawyer Paul Kouris to harness energy from vortices in large bodies of water is building momentum and has gained some much-needed credibility.

The concept — dismissed, even ridiculed, for years by physicists and generation experts — will be presented to the next EnergyChallenge conference in Sydney in August.

Its champion is Steve Hall, dean of engineering at Ballarat University, who will explain the results of his mathematical modelling of what is called the Kouris Centri Turbine.

"Professor Hall has reviewed our documentation ... and approved it," Mr Kouris said.

Professor Hall is planning to establish a prototype system at the university that will become the subject of a PhD thesis.

"They will reproduce my prototype on the university grounds and do a computer analysis of the result they get, as a control."

Mr Kouris has already built a prototype hydro-electricity system using large water tanks on a property in Victoria. His results showed that a turbine placed in the vortex created in the top of the body of water added as much as 27 per cent to the power generated by a turbine placed in the traditional downstream position.

An earlier plan to resurrect a historic hydro system on a farm outside Ballarat foundered for lack of financial support, but Mr Kouris said the Ballarat council was prepared to make available the Lal Lal Reservoir outside Ballarat for large-scale tests. He said it would be cheaper to retrofit his system there than at the farm.

The management of the reservoir also believes that the Kouris Centri Turbine could be used on its own in the many 5 million-litre holding tanks dotted around the country. Water is pumped up into these tanks during periods of low energy use so there is good mains pressure when the water is drawn off during the day.

"The idea is we could turn these holding tanks into vortex reservoirs and when the water passes out, we could generate electricity and the local councils could generate green credits by putting renewable energy into the national grid."

Mr Kouris said the Lal Lal installation would need about \$500,000 in capital, although he said advisers were steering him away from trying to mount a public float.

"We will be trying to find a business angel or individual champion," he said. Business services group William Buck had offered to help with the search.

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