



Media Release

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Shoalhaven pumped hydro could double in size

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today announced \$2 million in funding for Origin Energy to assess the feasibility of expanding the Shoalhaven Pumped Hydro Scheme.

If the \$6.8 million full feasibility study is successful, this proposal would nearly double the capacity from the existing 240MW to 475MW.

Located 150 kilometres south of Sydney in the NSW Southern Highlands, the Shoalhaven Pumped Hydro Storage Scheme currently consists of two pumped storage hydropower stations at Kangaroo Valley and Bendeela.

Earlier this year, Origin undertook pre-feasibility work on three potential design options for expanding the scheme.

ARENA's funding will go towards a full feasibility study based on the preferred option, which involves bypassing the Kangaroo Valley Power Station and instead pumping water from Lake Yarrunga to Fitzroy Falls Reservoir.

The option includes a 235 MW underground power station, taking advantage of the longer water head available, resulting in a higher output and efficiency.

ARENA CEO Darren Miller said the proposed expansion would help provide large-scale storage and would inform other pumped hydro developments.

"For more than forty years, Shoalhaven's pumped hydro scheme has been delivering reliable renewable power to the NSW grid. When it was built in 1977, Shoalhaven was future proofed to allow for more capacity to be added later on, which should reduce the cost and environmental impact of this project.

"The potential expansion of this scheme would provide more electricity over a shorter period so Origin can deliver capacity when needed - when demand is high or when renewable output is low," he said.

"The findings of this study at Shoalhaven will help provide key understandings that

can be applied to other hydro energy projects ARENA has supported such as Snowy 2.0, Hydro Tasmania's Battery of the Nation initiatives, Kidston in Queensland, Cultana and the Iron Duchess in South Australia," he said.

"We know that storage technologies - both pumped hydro and batteries - will be key to the transition to renewable energy in Australia, which is why we're supporting projects such as this that will help deliver secure and reliable electricity," Mr Miller said.

Origin executive general manager energy supply and operations Greg Jarvis said, "We welcome ARENA's support of a feasibility assessment into the expansion of the Shoalhaven pumped hydro scheme.

"Shoalhaven is in the unique position of having much of the required infrastructure needed for expansion already in place. This means it can be developed with less community and environmental impacts and in a shorter timeframe compared to developing the same amount of additional capacity as a greenfields project.

"This is a strong prospect for future expansion, because Shoalhaven can feed electricity into the grid in as little as three minutes, therefore improving reliability and complementing growing intermittent renewables in the system.

"We will now get on with important assessments and the necessary regulatory approvals that may allow us to double Shoalhaven's generating capacity in the future," Mr Jarvis said.

A full feasibility study is expected to be completed in 2019.

This announcement does not form a part of WaterNSW's current Renewable Energy Expression of Interest process.

A supplied video and animation package is available for media on request.