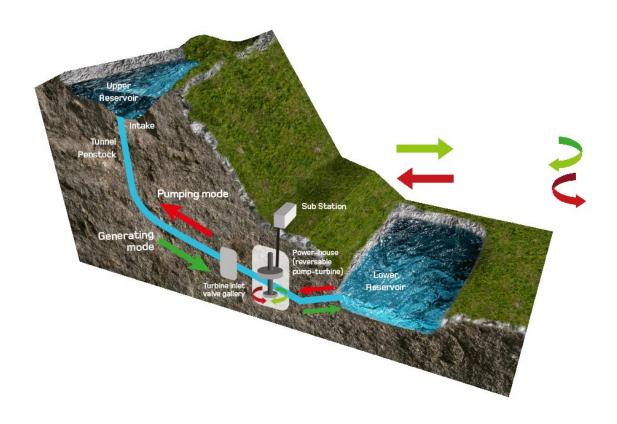


## Scottish company proposes hydro storage facility near Loch Ness

July 11 2018, by Bob Yirka



Credit: Intelligent Land Investments

Intelligent Land Investments (ILI), a Scottish company, has proposed building a hydro storage facility near the famous Loch Ness. The company has announced the plan on its website, explaining its benefits.



Hydro storage is not new, of course; people have been pumping water uphill for thousands of years to make use of it at a later date by running it back down again. In modern times, the scheme is used as a means for storing electricity generated using renewable (but unreliable) resources. Scotland is a perfect fit for such technology due to the country's vast offshore wind generating projects, ILI notes.

The plans for the facility, which the team has named "Red John," call for creating two reservoirs at different elevations. In between the two reservoirs is an underground pipe for transporting water from the lower reservoir to the upper, and for allowing it to drain back. In a midsection of the pipe is a facility to serve as both pump (to get the water uphill) and generator (to make electricity from the water flowing back downhill). Water from Loch Ness would be used to fill and refresh the reservoir.

ILI reports that their proposed plan calls for a 400MW pumped hydro scheme—big enough to power approximately 1 million homes for an hour, or more realistically, 400,000 homes for six hours. Employing such a plant, the company notes, would double the capacity of offshore wind production across Scotland. They note that Scotland is a world leader in moving to renewable resources to fulfill electric demand—approximately 69 percent of generated electricity in the country currently comes from solar, wind and other renewable resources. The government has set a goal of 100 percent renewable sources by 2020. But to reach that goal, they suggest, techniques for storing power for off-peak use are required. Currently, they add, when it is windy, production skyrockets, providing the grid with more electricity than is needed. But when the wind dies down, production drops with it. A hydro storage facility, they point out, would allow for storing excess energy and allowing its use during low production times.

If the plan is approved by the government, ILI predicts they could have



the plant up and running in three to five years.

**More information:** \* <u>ilienergy.com/2018/06/major-hy ... posed-for-loch-ness/</u>

\* www.redjohnpsh.co.uk/

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