

UK energy

Hydro power operators press for UK rules rethink

Push to release funds for investment and greater use of renewable energy



Planners are currently considering Ili Group's £500m pumped storage scheme at Loch Ness in Scotland © Andy Buchanan/AFP

Mure Dickie in Edinburgh 6 HOURS AGO



Developers of “pumped storage” hydro power plants in Scotland have called on the UK government to rethink energy market rules for such projects in order to release potentially billions of pounds in investment and greater use of renewable power.

Planners are currently considering Ili Group's £500m pumped storage scheme at Loch Ness, but Mark Wilson, the company's chief executive, said it would be “very difficult” to seal financing for it without a market “level playing field” for such projects.

Pumped storage plants use cheap or excess power from the grid to pump water from one reservoir into a raised basin, from where it can be released to flow back down to the lower reservoir to generate electricity.

Analysts say such plants are expensive to build but are highly efficient and can improve grid reliability and balance out fluctuations in output from wind farms and solar power schemes.

Greater electricity storage capacity is widely seen as vital to promote maximum use of renewable energy, but supporters of pumped storage say it is being held back by government failure to enable long-term power contracts that would,

Mr Wilson said Ili had a pipeline of pumped storage projects with total generating capacity of 2GW and was convinced they were the “logical” solution to ease strain on the UK grid caused by the closure of coal plants and increased use of wind and solar.

But the current UK market system did not give pumped storage investors the kind of long-term security used to encourage funding of interconnectors, which link the British grid to overseas networks, or of nuclear power plants, Mr Wilson said.

“Something needs to happen now,” he said.

Buccleuch Estates, one of Scotland's biggest landowners, has government consent for a [400MW plant](#) at Glenmuckloch in south-west Dumfries and Galloway.

But John Glen, who is conducting a review of energy projects for Buccleuch, said there was a need for a new government approach that would allow longer-term contracts for highly capital-intensive pumped storage projects.

“Investors are saying they don't have enough visibility [about future returns],” Mr Glen said.

Other planned new pumped storage in Scotland includes an [£800m SSE plant](#) in the Scottish Highlands. Meanwhile, ScottishPower drew up [plans](#) for a £400m expansion of its existing Cruachan pumped storage power station before the recent sale of the plant and other assets to UK power supplier Drax.



Cruachan hydro electric power station © Jeff J Mitchell/Getty Images

Researchers at Strathclyde university's Centre for Energy Policy said last year that the UK government recognised storage as a way to help cut carbon emissions, but “as yet little has been done in terms of removing barriers” to investment and the technology faced a “very uneven playing field” in the energy market.

State-owned electricity boards had been willing to shoulder construction costs of earlier plants, but no large-scale storage investments had been made since the market was liberalised in the 1980s, the researchers said in a [discussion](#)

A market framework that recognises the value of storage was needed along with greater policy certainty for the private sector, they said.

ScottishPower and SSE have in the past called for changes to the pricing regime for pumped storage plants, suggesting one option would be a “cap and floor” system that would guarantee utilities a minimum price for output but also set a maximum to limit potential cost to consumers.

Drax said it was considering its long-term options for Cruachan. SSE declined to comment on current prospects for its proposed new plant at Coire Glas.

Mr Glen, of Buccleuch Estates, said pumped storage schemes were particularly important given the opportunities for civil works employment offered by their construction and the questions raised by Brexit for the future role of interconnectors with European electricity networks.

A [consultation](#) on clean technology financing by the UK parliament's business, energy and industrial strategy select committee closes on Wednesday.

While industrial scale batteries are expected to play an increasing role in energy storage, supporters of pumped storage say it is more efficient, cleaner and more reliable and can be deployed at greater scale. Battery performance degrades over time, but Scottish pumped storage plants have been operating for more than half a century.

The Department of Business, Energy & Industrial Strategy has said that it is working to remove barriers to electricity storage technologies, including pumped hydro.