

SSE and Gilkes Energy collaborate on Loch Fearna Pumped Storage Hydro Project

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SSE Renewables and Gilkes Energy have announced a joint venture to develop the Loch Fearna pumped storage hydro (PSH) project in Scotland's Great Glen. The project, which could be one of the largest PSH schemes in the UK, will play a crucial role in supporting the UK's transition to a net-zero energy system.

Located near Invergarry, the Loch Fearna project will connect SSE Renewables' existing Loch Quoich reservoir with a new upper reservoir at Loch Fearna. With a potential generating capacity of up to 1.8GW and a stored energy capacity of around 37GWh, the project will deliver essential long-duration electricity storage (LDES) to balance the grid during periods of low renewable generation.

Gilkes Energy will lead the project's development under a development services agreement with SSE Renewables. The joint venture partners have already secured a grid connection offer and are currently consulting with local communities on the project. A planning consent application is expected to be submitted to the Scottish Government in due course.

Ross Turbet, Head of Investment Management for Hydro, SSE Renewables, said: "As the UK transitions to net zero, the development of additional pumped storage hydro projects will be crucial for energy security and for balancing an increasingly renewables-led energy system during periods when the wind doesn't blow, and the sun doesn't shine.

"The proposed Fearna project is a welcome addition to our development pipeline of pumped storage hydro projects, which also includes our proposal to develop what could be one of Britain's biggest pumped storage schemes in 40 years at Coire Glas and our intention to convert our existing Sloy Power Station into

a pumped storage facility. Our vision for the delivery of pumped energy storage solutions for a net zero Britain demonstrates SSE Renewables' ongoing commitment to optimising the value of our existing hydro assets while investing in new hydro projects as part of our wider renewable portfolio."

Carl Crompton, Managing Director, Gilkes Energy Limited, said: "We are delighted to launch, in partnership with SSE Renewables, the Fearn Pumped Storage project.

"Energy storage allows energy produced during times of excess generation (mainly wind) to be stored and released later when there is a deficit of renewable energy. Pumped Storage Hydro projects are in effect very large water batteries and the technology behind these projects is very mature and robust. PSH projects can easily last for 100+ years with no degradation in performance.

"The recent publication of the Government Consultation on Long Duration Electricity Storage (LDES) support, likely to be a 'Cap & Floor' mechanism, is also a significant step forward. This Consultation recognizes both the value of Pumped Storage Hydro, but also the challenge of financing such capital intensive and long lead time projects. The proposed Cap & Floor mechanism has been used successfully to bring multiple interconnector projects to fruition, and we hope a similar mechanism will unlock the financing of a number of PSH projects. We look forward to bringing this pioneering project to fruition."

The Fearn project is expected to reach commercial operation in the mid-2030s, subject to a final investment decision. The project's development aligns with the UK government's commitment to supporting long-duration energy storage through a potential cap and floor investment framework.