



# ENGINEERING GROUP & CENTRAL SCOTLAND REGIONAL GROUP OF THE GEOLOGICAL SOCIETY

## Tunnelling & Drilling through the Great Glen Fault

**Speaker: Chris Jack, Technical Director, COWI**

**Wednesday 23<sup>rd</sup> October 2024, 6:00pm start**

**In person at:**

**AECOM Glasgow Office, 177 Bothwell Street Glasgow, G2 7EQ**

**Register for both online and in person attendance via:**

**[Microsoft Virtual Events Powered by Teams](#)**



SSE Renewables are developing the Coire Glas Hydro Pumped Storage Scheme. It is located in Glengarry Forest approximately 3 km southwest of Kilfinnan, near Laggan Locks and approximately 40 km northeast of Fort William in the Scottish Highlands.

The Scheme comprises an upper and lower reservoir. Loch Lochy serves as the lower reservoir and is an SSE Renewables-managed hydroelectric resource. The existing Loch a' Choire Ghlais will be impounded and enlarged to form the upper reservoir. Overall, the Scheme will have a generating capacity of 1296 MW, with an energy storage capacity of 30 GWh.

Stór (a partnership between Stantec and COWI) has prepared the reference design for the scheme and planned and supervised the Exploratory Works, which comprise the surface ground investigation, a >1.1 km long exploratory adit and underground drilling and testing. The surface ground investigation was carried out

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by Fugro, with the exploratory adit and underground drilling being carried out by Strabag. The British Geological Survey has assisted with the geological aspects throughout the project and Parry Engineering Geological Services has carried out a geomorphological and landslide assessment.

The Exploratory Works are intended to provide ground engineering information onto which to base the detailed design, risk management and the geotechnical baseline report for the scheme. The works commenced in Autumn 2023 and are programmed to be complete in December 2024. The surface ground investigation and the exploratory adit are complete and the underground drilling and testing is underway.

The presentation will give an overview of the Exploratory Works so far, including the various interesting in situ tests (including geophysics, packer tests, hydrofracturing, overcoring, large-scale plate jack testing, Goodman jacks and high-pressure dilatometers). A particular point of interest for geologists is the tunnelling through the Great Glen Fault Zone and this will also be discussed.

### Speaker

Chris is a technical director at COWI with 22 years' experience in engineering geology and rock engineering, with experience in tunnelling, cavern engineering, rock slopes, site investigation, foundations, earthworks, retaining walls, excavations, geotechnical asset management, landslides, engineering geomorphology, quarrying, mining and mining remediation.



In his own time he likes to dabble in (too) many hobbies and consequently is not particularly good at any of them but trips out into the hills have probably held his interest most consistently.

More information on the Engineering Group & Central Scotland Regional Group can be found on the Geological Society website under Groups: <https://www.geolsoc.org.uk/groups>