THE CENTRAL SCOTLAND REGIONAL GROUP OF THE GEOLOGICAL SOCIETY

The Coire Glas Ground Investigation

Speaker: Jessica Smith, Senior Engineering Geologist, Technical Authority, SSE Renewables

Tuesday 9th April 6:30pm start

Register online via:
https://us02web.zoom.us/meeting/register/tZwpd-yqqj8rHtZQZt7osIlL8lcrDa5qnjVm

In person at:
Room TL324, Learning & Teaching Building, University of Strathclyde, 49 Richmond Street, Glasgow, G1 1XU. Please confirm attendance to csrgchair@gmail.com.

Joint event with the Western Regional Group

Coire Glas is a proposed hydro pumped storage scheme located in the Highlands of Scotland with a potential capacity of up to 1,500MW. Coire Glas is located in the Great Glen, a striking landscape feature with complex ground conditions including the boundary between the Great Glen Fault Zone and the Tarvie Psammite Formation.

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Coire Glas is the first large-scale pumped storage project to be developed in the UK for more than 40 years and would more than double Great Britain's existing electricity storage capacity.

Pumped storage hydro works by using two reservoirs of water at different elevations over a short distance that can:

- Generate power as water moves from the upper reservoir to the lower reservoir, passing through turbines housed in the power station complex.
- Pump water back into the upper reservoir at times of excess renewable energy generation, allowing the excess renewable power to be captured and stored, similar to a giant battery.

At Coire Glas the lower reservoir will be formed by the existing Loch Lochy where a 92m high dam will be constructed. The power station complex will be housed in caverns approximately 1km deep within the hillside.

To date, SSE Renewables has made a £100M investment in Coire Glas with a large proportion invested in ground investigation (GI). The most recent GI activities commenced on site in early 2023 and comprise the following:

- Exploratory Works: 1km long, 5m diameter drill and blast exploratory tunnel with a planned drilling gallery and borehole array. The purpose is to obtain high quality data from the proposed cavern location.
- Wider Site GI (WSGI): a total length of 1,775m of boreholes including a 650m deep borehole, trial trenches, geophysics (terrestrial and over water), in-situ and laboratory testing.

Speaker

Jessica is SSE Renewables' Technical Authority for Engineering Geology on their proposed Coire Glas hydro pumped storage scheme. A Chartered Geologist, Jessica has 18 years of experience in the ground engineering sector. Jessica is a former Vice President (Regional Groups) of the Geological Society.

More information on the Central Scotland Regional Group can be found on our webpage.