

Summit Group announces bid to build carbon capture and storage plant in Scotland

March 21 2012, by Bob Yirka

(PhysOrg.com) -- For several years the government of the United Kingdom has been trying to build a low-carbon coal fired power plant by means of competitions between companies seeking the £1 billion reward that would go along with such a contract. The last go-round wound up with just one competitor, Scottish Power whose bid faltered in the end due to it being too expensive. This time an American conglomeration called the Summit Power Group has jumped into the fray by partnering with the National Grid, an electric and gas company that provides service to customers in the United Kingdom and parts of the United States and petroleum company Petrofac. Their idea is to build a Carbon Capture & Storage (CCS) coal fired power plant to be located in Scotland's Port of Grangemouth, that Summit says will release 90% less carbon emissions than conventional plants.

Summit's boast is not just marketing hype, they're already in the middle of building a similar plant in Texas paid for by a grant from the US government.

The bid for the plant is due to the UK's <u>Carbon Capture</u> & Storage Delivery Competition. If built, the plant would be called the Caledonia Clean Energy Project, situated west of Edinburgh on the Firth of Forth; a location chosen due to already existing oil and gas pipeline facilities. In addition to using coal to create electricity, the plant would also produce hydrogen gas for sale to commercial customers. Also, because the location is close to the North Sea, the CO_2 that is removed during the process of making electricity could be easily moved and sequestered



under the sea for storage, by Petrofac which just happens to have a subsidiary company called CO2DeepStore that does just that.

The group says that unlike Scottish Power, who estimated the project would cost £1.5 billion, they can get the job done for the £1 billion that the competition dictates. One possible hiccup thus far though is Summit's plan to use the CO_2 extracted, rather than sequester it, at a later date, as part of an enhanced oil recovery process under the North Sea, which has environmentalists worried.

Summit also says that it is able to capture carbon during the process more efficiently than other <u>plants</u> because it doesn't actually burn the coal used in the plant. Instead, they say, a chemical process is used.

More information: Press release

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