FuelCell Energy Announces New Carbon Capture Project with Drax Power Station

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- Engineering of system for carbon capture from biomass boilers at UK's largest renewable power station
- Demonstrating capability of negative carbon emissions from clean power generation

DANBURY, Conn., June 27, 2019 (GLOBE NEWSWIRE) -- FuelCell Energy, Inc. (Nasdaq: FCEL), a global leader in delivering clean, innovative and affordable fuel cell solutions for the supply, recovery and storage of energy, today announced that it has entered into a contract with Drax Power Station in the United Kingdom for an application of the Company's carbon capture solution. FuelCell Energy will be supporting Drax with a Front End Engineering and Design (FEED) study evaluating the use of the Company's propriety carbonate fuel cells to capture carbon dioxide (CO2) emissions from Drax's biomass boilers.

Drax Power Station is the largest single-site renewable power generator in the UK. Located near Selby, North Yorkshire, it has a capacity of over 3,900 megawatts of renewable power generation, primarily from sustainable wood pellets sourced from responsibly managed forests. Carbon dioxide linked to the carbon cycle of forests is considered carbon neutral and therefore, carbon capture employed at this project would make the power station carbon negative. Bio-Energy with Carbon Capture and Storage (BECCS) is one of the most promising approaches to carbon reduction because of the ability to be carbon negative at large scales.

FuelCell Energy’s carbon capture technology is based on the Company's proprietary carbonate fuel cell power plants, which are able to concentrate CO2 from dilute flue gas streams as a side reaction during power generation. The concentrated CO2 is then available for sequestration or utilization.

The FEED study will focus on a system that captures up to 85 tonnes of CO2 per day while generating additional power for the station. The ability to co-produce valuable electricity during carbon capture provides a significant
advantage over conventional solvent-based CO2 capture systems that consume both heat and electricity to operate. The fuel cell also destroys up to 70% of NOx emissions from the flue gas.

Drax plans to use the CO2 captured within a greenhouse abutting the power station. Potentially any excess CO2 captured could be transported to other greenhouse locations.

FCE’s carbonate fuel cell is modular, and this FEED study supports a potential future demonstration project that will utilize two standard fuel cell modules similar to FCE’s SureSource3000 commercial power generation system. Once demonstrated, the technology can easily be scaled up to capture a significant portion of the power station’s CO2 output. This initial FEED study will be completed in late 2019, and a detailed design and cost estimate for the demonstration system will be part of the FEED study. Completion of the FEED study may lead to the construction and operation of the demonstration system in a subsequent project.

“Carbon capture using FuelCell Energy’s solution is a potential game-changer for affordability and efficiency of concentrating and capturing carbon dioxide from emitters,” said Tony Leo, Executive Vice President and Chief Technology Officer, FuelCell Energy. “We are pleased to have the opportunity to partner with Drax and the BEIS (United Kingdom, Department for Business, Energy and Industrial Strategy) for such an innovative and critically important subject as cleaner energy.”

Will Gardiner, Drax Group CEO, said “We believe fuel cell technology could help us to meet the rise in global demand for electricity, whilst capturing the carbon dioxide produced during its generation. Our FEED study will help us to understand the technical and economic feasibility of fuel cells, with a view to scaling the technology up, whilst showing that clusters of businesses working together to deliver climate change solutions, can also deliver benefits for their businesses.”

Chris Skidmore, Energy & Clean Growth Minister, said: “Cutting edge technology to capture carbon will cut emissions as we work towards a net zero economy while creating new jobs – a key part of our modern Industrial Strategy. This innovative project from Drax represents a major milestone in efforts to rollout carbon capture at scale by the 2030s.”

Cautionary Language
This news release contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including, without limitation, statements with respect to the Company’s anticipated financial results and statements regarding the Company’s plans and expectations regarding the continuing development, commercialization and financing of its fuel cell technology and business plans. All forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Factors that could cause such a difference include, without limitation, changes to projected
deliveries and order flow, changes to production rate and product costs, general risks associated with product development, manufacturing, changes in the regulatory environment, customer strategies, unanticipated manufacturing issues that impact power plant performance, changes in critical accounting policies, potential volatility of energy prices, rapid technological change, competition, and the Company's ability to achieve its sales plans and cost reduction targets, as well as other risks set forth in the Company's filings with the Securities and Exchange Commission. The forward-looking statements contained herein speak only as of the date of this press release. The Company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any such statement to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based.

About FuelCell Energy
FuelCell Energy, Inc. (NASDAQ: FCEL) delivers efficient, affordable and clean solutions for the supply, recovery and storage of energy. We design, manufacture, undertake project development of, install, operate and maintain megawatt-scale fuel cell systems, serving utilities and industrial and large municipal power users with solutions that include both utility-scale and on-site power generation, carbon capture, local hydrogen production for transportation and industry, and long duration energy storage. With SureSource™ installations on three continents and millions of megawatt hours of ultra-clean power produced, FuelCell Energy is a global leader in designing, manufacturing, installing, operating and maintaining environmentally responsible fuel cell power solutions. Visit us online at www.fuelcellenergy.com and follow us on Twitter @FuelCell_Energy.


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