



NEWS RELEASE

# FuelCell Energy Deploys Advanced Solid Oxide Fuel Cell

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DANBURY, Conn., April 09, 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 the commissioning of the world's most advanced and flexible solid oxide fuel cell project in Pittsburgh, Pennsylvania. This sub-MW power plant employs an easily sited design, significant power density and deployment to a broad range of applications to gain volume and cost scale. The project is supported by the US Department of Energy office of Fossil Energy under Cooperative Agreement DE-FE0026199, through DOE's National Energy Technology Laboratory (NETL). Strategically, the solid oxide fuel cell product complements FuelCell Energy's existing carbonate fuel cells, as the carbonate product line provides solutions for multi-megawatt applications including power generation, carbon capture and distributed hydrogen, whereas the solid oxide fuel cell addresses applications for sub-megawatt power generation, long duration energy storage, and distributed hydrogen from electrolysis.

"The commissioning of this power plant marks a major step forward in the commercialization of our solid oxide platform, which will address multiple applications, including sub-megawatt power generation, long duration energy storage and complementary hydrogen solutions," said Chip Bottone, President and Chief Executive Officer, FuelCell Energy, Inc. "We have pursued development of a highly efficient and cost effective solution using our patented solid oxide technology, with particular design emphasis on a common cell stack design for this extensive range of applications."

The flexibility of the solid oxide platform stems from the ability of the cells to provide a variety of functions. The common stack can be used in power generation systems such as the Pittsburgh unit, where natural gas fuels ultra clean power generation. The system is also capable of supplying waste heat for on-site combined heat and power

applications, and these systems are also able to operate on renewable biogas. The stacks can also be deployed in electrolysis systems, where they efficiently split water to produce hydrogen. Solid oxide electrolysis is capable of operating much more efficiently than conventional electrolysis systems, requiring less power to produce the same amount of hydrogen. The cells are capable of operating reversibly – alternating between electrolysis and fuel cell mode. Hydrogen produced by electrolysis can be stored, and later supplied back to the stacks to produce power, resulting in an energy storage system where storage duration can easily be lengthened by simply adding water and hydrogen storage capacity.

Mr. Bottone continued, “The power generation application, as this commissioned unit will be performing, will expand our target market, as currently our commercial offerings begin at 1.4 megawatts of electrical supply. We will be able to offer a fuel cell solution that will position FuelCell Energy quite competitively in the sub-megawatt class market segment with superior performance and cost profile versus current competitive offerings.”

“Additionally, we identified long ago the growing need for long duration storage of energy, and this need has only grown larger with the rapid addition of intermittent power sources such as wind and solar,” added Mr. Bottone. “Our solution, when full commercialization is achieved, will provide a distinct cost advantage versus traditional lithium ion battery storage solutions for discharge durations extending beyond six hours. This long duration energy storage capability, along with efficient electrolysis, are expected to be very effective in managing grid reliability in light of the increasing penetration of intermittent renewable power on the grid.”

#### Forward Looking Statement

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](http://www.fuelcellenergy.com) and follow us on Twitter [@FuelCell\\_Energy](https://twitter.com/FuelCell_Energy).

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