



NEWS RELEASE

FuelCell Energy Details Microgrid Performance Successes

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15 Years of Industry Leadership – Providing Reliable Solutions

DANBURY, Conn., Jan. 14, 2020 (GLOBE NEWSWIRE) -- **FuelCell Energy, Inc.** (Nasdaq: FCEL), a global leader in delivering clean, innovative and affordable fuel cell solutions, is releasing details on the successful performance of its SureSource™ fuel cells in providing microgrid solutions. Microgrids have become a priority in the Northeast US and in California following extended power outages due to weather events and most recently with wildfire threats in California. The need for microgrids to improve grid reliability will continue to grow in its importance to deliver the benefits of always-on power. California utility regulators recently mandated Public Service Power Shutoffs (“PSPS”) in an effort to avert wildfires being sparked by transmission lines and/or transmission distribution equipment. Millions of Californians have lost power as a result of PSPS, leading to economic loss, hardship, and even more serious consequences for those reliant on electricity for healthcare treatment, continuous manufacturing processes, emergency response centers, and other mission critical operations. Some facilities in California impacted by these shutoffs remained operational because they had microgrid systems powered by FuelCell Energy fuel cells.

FuelCell Energy has been at the forefront of microgrid development since the earliest days of commercial fuel cell manufacturing. The Company’s first microgrid application was deployed in 2004 to ensure reliable event power for the 2004 Democratic National Convention in Boston, Massachusetts. Through this temporary system, one of the Company’s 250kW fuel cell power plants was trailer mounted and operated in a microgrid in conjunction with engine generator sets to power media loads such as studios, network satellite up-links, and office trailers to deliver an uninterrupted DNC Convention. This project was the genesis of the Company’s microgrid technology development, leading to today’s advanced products that are deployed and capable of seamlessly switching between operating in parallel with the utility grid, in parallel with a microgrid, or completely grid independent.

FuelCell Energy's SureSource microgrid solutions deliver energy security, economic benefits and also help deliver on the environmental goals of low CO₂, near zero criteria pollutants, and the ability to site generation where it is needed given the small footprint and low noise of the complete line up of SureSource fuel cells. In many instances, the fuel cell microgrids operate in a combined heat and power mode, delivering thermal energy benefits in addition to electricity generation, thus driving overall efficiencies potentially as high as 90%. Two of FuelCell Energy's microgrid projects in California remained operational in areas impacted by PSPS, providing steady, reliable power to the University of California, San Diego and the Santa Rita Jail during a time when over 3 million Californians were generally affected by PSPS.

"When designed and implemented properly, microgrids capitalize on all the benefits of fuel cells for on-site energy applications," said Ben Toby, Senior Vice President, Direct Sales and Customer Service. "FuelCell Energy's innovation in the development of fuel cell microgrids delivers all of the value streams of this cutting edge technology to our customers, including resilient, reliable, cost-effective clean energy."

Microgrids are more than simple back up power applications. They require integration of critical loads and power generation sources with sophisticated approaches to grid independent operation, sometimes requiring multiple power generation sources to synchronize with each other and non-critical loads to be shed for seamless transition. FuelCell Energy's microgrid technology has evolved over years of successful projects to effectively address the requirements of this important application.

Examples of FuelCell Energy microgrid solutions include:

- 2.8 MW plant at University of California at San Diego, the first commercial application integrating a fuel cell with a microgrid.
- Maximum security Santa Rita Jail in California.
- Campus combined heat and power microgrids at the University of Bridgeport, Amity Regional High School, and Pfizer's R&D Center in Connecticut.
- Currently construction is well underway for a microgrid using FuelCell Energy's SureSource 4000™ plants at the U.S. Navy submarine base in Groton, CT.

University of Bridgeport

The University of Bridgeport ("UB") is a private university located in Bridgeport, Connecticut, and comprised of approximately 5,500 students with 1,250 on-campus residents. One SureSource 1500, a 1.4 MW fuel cell plant, operates in combined heat and power mode, delivering approximately 80% of the campus power needs. Waste heat is used to make hot water that is supplied to two dormitories in addition to heating the campus's Olympic size

swimming pool. During grid outages, the microgrid is configured to automatically disconnect from the grid and remain connected to the fuel cell, allowing the police, campus and community health services, administration, and student housing to remain energized. UB's fuel cell microgrid maintains reliable power while saving the campus money on energy costs and reducing CO₂ by 7,000 tons, SO_x by 64 tons, and NO_x by 28 tons each year.

United Illuminating / Town of Woodbridge, CT

In 2018, United Illuminating energized a SureSource 3000 at Amity High School in Woodbridge, CT. During normal operation, the fuel cell delivers 2.2 MW of baseload power to the United Illuminating electric distribution grid. Upon experiencing a grid outage, switchgear enables a seamless transition to local-only mode, whereby power is fed through dedicated underground lines to the high school, as well as the Town of Woodbridge police station, town hall, fire station, public works depot, library and senior living facility. The Town's critical buildings continue to serve the needs of the community while the local electric distribution grid is down. This is a perfect example of a well-executed strategy to harden grid infrastructure in order to better withstand the types of catastrophic storms experienced in the Northeast in recent years.

Santa Rita Jail, Alameda County, California

Santa Rita Jail in Dublin, California houses 4,000 inmates in the 5th largest prison in the country. The 1.4 MW fuel cell at Santa Rita Jail shares power supply duties with a 2 MW solar photovoltaic array, and a 4 MWh lithium ion battery system. Combined with a static switch at the jail's substation, these three technologies supply a highly reliable ultra clean power island for the facility. Maximum value from the fuel cell is assured by the close tie-in of the fuel cell thermal exhaust with the jail's hot water space heating system. This state of the art system is delivering high energy security, energy cost savings, and sustainability benefits to the jail facility.

University of California at San Diego

The University of California at San Diego has a showcase microgrid system that is among the most advanced in the world. Serving more than 40,000 students on a 1,000 acre campus, the microgrid manages a variety of generators serving more than 400 buildings. Distributed energy resources on the microgrid include steam and gas turbines, solar cells, and a 2.8MW SureSource 3000 fuel cell power plant. In addition to providing power to the facility microgrid, the fuel cell also supplies waste heat to drive an absorption chiller to provide chilled water to the campus.

Municipalities, college campuses, hospitals or any facility which needs uninterrupted power during a grid outage can benefit from the installation of a microgrid with a SureSource fuel cell power plant as the distributed energy resource.

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](https://twitter.com/FuelCell_Energy).

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