

October 24, 2013

## **FuelCell Energy Announces Market Development Updates in Asia for Efficient and Environmentally Friendly Fuel Cell Power Generation**

- *Construction started for South Korean fuel cell manufacturing facility*
- *Growing Asian demand for ultra-clean, efficient and reliable distributed generation*
- *POSCO Energy and FuelCell Energy enter into a Master Service Agreement for Asian fuel cell power plant installations*

DANBURY, Conn., Oct. 24, 2013 (GLOBE NEWSWIRE) -- [FuelCell Energy, Inc.](#) (Nasdaq:FCEL), a global leader in the design, manufacture, operation and service of ultra-clean, efficient and reliable fuel cell power plants, today announced a series of updates with its South Korean partner, POSCO Energy, including the start of construction for the South Korean fuel cell manufacturing facility, growing demand for multi-megawatt fuel cell installations, and the execution of a master service agreement for installations in Asia.

POSCO Energy is licensed to manufacture Direct FuelCell<sup>®</sup> power plants in South Korea and commenced construction of the previously announced manufacturing facility. The facility will serve Asian markets and is expected to be producing in 2015 with an initial capacity of 100 megawatts (MW) per year and capacity will be increased as demand supports. Industrial engineering enhancements at the FuelCell Energy (FCE) production facility in North America increased total production capacity to 100 megawatts annually and these enhancements will be incorporated into the South Korean production process, accounting for the increased production capacity compared to previously stated figure of 70 MW annually.

Increasing production volume leads to lower product costs for both FuelCell Energy and POSCO Energy as a globally integrated supply chain serves all the manufacturing facilities, including this new facility in Pohang, South Korea as well as existing production facilities in Torrington, Connecticut, USA and Ottobrunn, Germany. Greater purchasing volume and enhanced predictability of demand reduces material costs.

The South Korean market is adopting large-scale fuel cell parks and the project pipeline of POSCO Energy is oriented towards multi-megawatt installations composed of two to twenty power plants per site. The fuel cell parks supply continuous ultra-clean power to the electric grid near the point of use and can supply steam or hot water to district heating systems.

"Highly efficient and low emission fuel cells are meeting the needs of power generators in South Korea and we are discussing more multi-megawatt projects in the second year following the adoption of the renewable portfolio standard," said Jung-Gon Kim, Senior Vice President, POSCO Energy.

"We value our relationship with POSCO Energy as they are an excellent partner for expanding the Asian market based on their commitment, their power generation expertise and the resources that they are investing in market development such as the production facility in Pohang, South Korea," said Chip Bottone, President and Chief Executive Officer. "As we discuss multi-megawatt projects with prospective customers and project investors in North America and Europe, it is helpful to have a strong partner in Asia to provide validation of the market opportunities."

The Gyeonggi Green Energy 59 MW fuel cell park illustrates the scale and the ability to rapidly construct multi-megawatt fuel cell installations. Construction began in December 2012 and all twenty one of the DFC3000<sup>®</sup> fuel cell power plants are installed and operating, undergoing commissioning or being prepared for commissioning. Sixteen of the plants are operational, producing ultra-clean electricity for the South Korean electric grid and usable high quality heat for a district heating system. Full operation is expected by the end of 2013 or early 2014. This park is a global model demonstrating ultra-clean and efficient power generation that can improve the resiliency of the electric grid due to the ability to easily site fuel cell power plants throughout an electric utility service area.

High urban population densities, costly imported fuels and adoption of a visionary renewable portfolio standard support the demand for clean and efficient distributed generation including fuel cells. POSCO Energy is witnessing an increase in inquiries for multi-megawatt installations, including:

- Seoul City, the capital of South Korea, previously announced a program to install 230 megawatts of fuel cell power plants to enhance power independence with an efficient and environmentally friendly distributed power generation solution. Seoul City is moving forward with Korea Hydro and Nuclear Power (KHNP), an electric utility, to procure and install the first stage of fuel cell power plants totaling 120 MW beginning with a 20 MW fuel cell park. This fuel cell park will be located on a former municipal landfill that has been converted to a new and renewable energy park containing a solar power array and a hydrogen fueling station utilizing landfill gas. The fuel cell park will use clean natural gas to

generate low carbon and virtually pollutant free electricity adequate to power approximately 43,000 households and heat adequate for 9,000 households and is expected to be fully operational by the end of 2014.

- The first phase of the South Korean Renewable Heat Obligation (RHO) beginning in 2016 requires new commercial building construction exceeding 10,000 square meters to contain on-site new & renewable power generation such as combined heat and power fuel cell plants. The program goals are to reduce the emission of greenhouse gases and support economic growth through clean energy adoption. The second phase begins in 2020 and expands the requirement to buildings of 5,000 square meters or larger. POSCO Energy has two sub-megawatt Direct FuelCell<sup>®</sup> products for on-site applications and the high urban density of South Korea supports the servicing of sub-megawatt as well as multi-megawatt installations. The population is concentrated in urban areas and on-site power requirements account for approximately 60 percent of total energy use in metropolitan areas such as Seoul City, highlighting the size of the potential market.
- Liquefying and transporting natural gas results in some leakage of the gas, termed boil-off gas. POSCO Energy recently signed a contract with Korea Gas Corporation (KOGAS), the world's largest LNG importer, for a demonstration project at the Samcheok LNG terminal to utilize boil-off gas to generate ultra-clean power, rather than letting the gas escape or incurring the cost to re-liquefy the gas. This project is intended to be the initial step in developing multi-megawatt fuel cell parks at LNG facilities to generate electricity for the LNG operations and to supply to the electric grid. The market potential is sizeable as POSCO estimates a 600 megawatt LNG opportunity in just South Korea.
- The South Korean Ministry of Trade, Industry and Energy (MOTIE) recently announced a plan to introduce the second phase of the Renewable Portfolio Standard, expanding compliance obligations to major commercial energy users such as the information technology and heavy industry sectors, with implementation expected in 2016. POSCO Energy anticipates a significant market opportunity will develop that has even greater market potential than the large market opportunity from the current RPS program that is oriented towards power producers.

Service is an important facet of the fuel cell business model, both to serve the customer and to provide a source of stable and recurring revenue. Service agreements are up to 20 years in duration and include scheduled fuel cell module exchanges. FCE and POSCO Energy recently executed a revised Master Service Agreement whereby POSCO assumes more responsibility for servicing installations in Asia that utilize power plants manufactured by POSCO Energy. FCE will perform engineering and support services for each unit in the installed fleet and receive quarterly fees as well as a royalty on each scheduled fuel cell module exchange built by POSCO Energy and installed at any plant in Asia.

Fuel cells electrochemically convert a fuel source into electricity and heat in a highly efficient process that emits virtually no pollutants due to the absence of combustion. The Direct FuelCell<sup>®</sup> stationary fuel cell power plants manufactured by FuelCell Energy utilize carbonate fuel cell technology and provide continuous baseload power that is located where the power is used, including both on-site applications and electric grid support. The combination of near-zero pollutants, modest land-use needs, and quiet operating nature of these stationary fuel cell power plants facilitates locating the power plants in urban locations. The power plants are fuel flexible, capable of operating on natural gas, on-site renewable biogas, or directed biogas.

### ***About FuelCell Energy***

Direct FuelCell<sup>®</sup> power plants are generating ultra-clean, efficient and reliable power at more than 50 locations worldwide. With more than 300 megawatts of power generation capacity installed or in backlog, FuelCell Energy is a global leader in providing ultra-clean baseload distributed generation to utilities, industrial operations, universities, municipal water treatment facilities, government installations and other customers around the world. The Company's power plants have generated more than 1.8 billion kilowatt hours of ultra-clean power using a variety of fuels including renewable biogas from wastewater treatment and food processing, as well as clean natural gas. For more information, please visit [www.fuelcellenergy.com](http://www.fuelcellenergy.com).

See us [on YouTube](#)

Direct FuelCell, DFC, DFC/T, DFC-H2 and FuelCell Energy, Inc. are all registered trademarks of FuelCell Energy, Inc. DFC-ERG is a registered trademark jointly owned by Enbridge, Inc. and FuelCell Energy, Inc.

CONTACT: FuelCell Energy, Inc.

Kurt Goddard, Vice President Investor Relations

203-830-7494

[ir@fce.com](mailto:ir@fce.com)