

FUELCELL ENERGY INC  
Form 8-K  
January 10, 2011

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549  
FORM 8-K  
CURRENT REPORT**

**Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): January 10, 2011**

**FUELCELL ENERGY, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

**1-14204**

**06-0853042**

(State or other jurisdiction  
of incorporation)

(Commission File Number)

(IRS Employer Identification No.)

**3 Great Pasture Road,  
Danbury, Connecticut**

**06813**

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: **(203) 825-6000**

**Not Applicable**

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 1.01 Entry into a Material Definitive Agreement.**

On January 10, 2011, FuelCell Energy, Inc. (referred to herein as FuelCell, the Company, us, we and our) entered into a placement agent agreement with Lazard Capital Markets LLC (the Placement Agent) relating to a registered direct offering by the Company of up to an aggregate of 10,160,428 units (Units). Each Unit consists of one share of FuelCell's common stock and one warrant to purchase 1.0 share of the Common Stock at a negotiated purchase price of \$1.87 per unit. FuelCell will raise gross proceeds of approximately \$19.0 million from the offering of the Units. The sale of the units is being made pursuant to a subscription agreement between FuelCell and the sole institutional investor in the offering. The net offering proceeds to the Company from the sale of the Units, after deducting the Placement Agent's fees and other estimated offering expenses payable by the Company, are expected to be approximately \$17.8 million.

The per share exercise price of the warrants is \$2.29. The warrant can be exercised beginning on the date that is six months and one day after the initial closing date and will expire twenty one months after issuance. In addition, FuelCell will obtain the right, subject to certain conditions, to require the investor to purchase up to 10.0 million additional shares approximately nine months post the initial closing date of the transaction. The sale price for the additional shares will be based on a fixed 10% discount to a VWAP measurement at the time FuelCell exercises the option. FuelCell cannot require the investor to purchase more than \$20 million of additional shares.

The transaction is expected to close on or about January 13, 2011 subject to customary closing conditions. A copy of the placement agent agreement, opinion of Robinson & Cole LLP, the form of subscription agreement and the form of warrant being entered into with the investor are attached to this Current Report on Form 8-K as Exhibits 1.1, 5.1, 10.1 and 10.2, respectively, and are incorporated herein by reference. The foregoing is only a brief description of the material terms of the placement agent agreement, the warrant and the subscription agreement, does not purport to be a complete description of the rights and obligations of the parties thereunder and such descriptions are qualified in their entirety by reference to these Exhibits.

The Company offered and is selling the above-described securities pursuant to a prospectus dated September 21, 2010 and a preliminary prospectus supplement dated January 10, 2011 (the Prospectus Supplement), pursuant to the Company's shelf registration statement on Form S-3 (SEC File No. 333-164412), previously declared effective by the Securities and Exchange Commission (the Shelf Registration Statement). This report on Form 8-K is being filed in part for the purpose of incorporating Exhibits 1.1, 5.1, 10.1, 10.2 and 99.1 by reference into the Shelf Registration Statement.

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Earlier today, FuelCell issued a press release announcing the above-described offering. A copy of the press release is attached as Exhibit 99.1 hereto and is incorporated herein by reference.

**Item 8.01. Other Events.**

This information included in this Current Report on Form 8-K under this Item 8.01 provides a summary of information with respect to recent developments, which such information has been disclosed in the Prospectus Supplement. As used herein, all degrees refer to Fahrenheit (F), and kilowatt and megawatt numbers designate nominal or rated capacity of the referenced power plant. As used in this prospectus, kilowatt (kW) means 1,000 watts; megawatt (MW) means 1,000,000 watts; and kilowatt hour (kWh) is equal to 1 kW of power supplied to or taken from an electric circuit steadily for one hour. All dollar amounts are in U.S. dollars unless otherwise noted.

**Recent Developments**

*2010 Update*

Our strategy is focused on continuing to reduce our product costs while expanding in our key geographic and vertical markets to grow sales volume. We believe that the combination of these two activities will drive our path to profitability.

We received order flow of 16.4 MW in 2010 which illustrates the growing recognition of the need for baseload renewable power and the need to use abundant and affordable supplies of natural gas in the U.S. as cleanly and efficiently as possible. As renewable technologies like wind and solar are deployed more widely, the need for clean baseload technology that complements these intermittent sources becomes more acute, particularly baseload power that utilizes renewable biogas. The ability of DFC Power Plants to utilize renewable biogas to efficiently produce clean electricity in a reliable manner was a primary driver of order flow during the fourth quarter of 2010. 11.0 MW of the orders received will operate on renewable biogas while the remaining 5.4 MW will operate on natural gas. Fuel cells operating on natural gas are attractive for customers that value the clean power and distributed generation attributes of fuel cells. The virtual lack of pollutants emitted by fuel cells is important in areas with strict clean air permitting regulations such as certain regions of California. Providing reliable on-site power generation that reduces reliance on the transmission grid is also an important attribute of fuel cells that contributed to order activity in 2010. During 2010, we received our first direct utility purchase in the U.S. from a major utility in California. Domestic orders received in 2010 also included two 2.8 MW DFC3000 power plants, which will be our first installations of this product in the U.S. Prior to these two orders, the DFC3000 had only been sold in South Korea.

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For several of these projects, we saw a variety of financing structures used, including traditional project financing, bonds, grants and tax credits as well as new distribution partners with their own sources of capital. Our power plant projects typically cost multiple millions of dollars, have lead times that exceed one year and have project lives that may span five years or longer. The improved availability of capital was instrumental in closing these orders and potentially supports future order activity.

The 16.4 MW of orders received during 2010 were concentrated in the second half of the year, with 12.7 MW received in the fourth quarter. Orders were primarily from U.S. customers in 2010 compared to order activity in 2009 and 2008 that included orders from POSCO Power, which we expect in 2011. Customers, primarily POSCO Power, ordered 32.8 MW of fuel cells in fiscal 2009 and 32.3 MW in fiscal 2008. We ended fiscal 2010 with 33.5 MW in backlog with 92 percent of the backlog representing multi-megawatt products, modules and module kits and 8 percent of the backlog representing sub-megawatt products. Product and service backlog totaled \$154.3 million at the end of 2010, the highest backlog ever achieved. Market updates for the fiscal year were as follows:

Commercial Products

*California:* Clean energy deployment remains a focus in California with 15.2 MW of orders received during fiscal 2010. The State and its Public Utilities Commission are driving clean energy deployment to reduce greenhouse gases and pollution while encouraging the utilization of distributed generation. Fiscal 2010 California orders will utilize a variety of fuels, including renewable biogas, directed biogas and natural gas:

6.5 MW of power plants will be located at wastewater treatment facilities and will utilize renewable biogas for fuel. These orders included a repeat customer as a municipal water district chose to utilize DFC power plants at another one of their wastewater treatment plants following an initial purchase in 2007.

4.5 MW of power plants will operate on directed biogas in San Diego, California including locations at the University of California, a city-owned pump station and a wastewater treatment plant. Renewable biogas generated from the wastewater treatment process will be cleaned and injected into an existing gas pipeline to fuel the power plants.

4.2 MW of power plants will operate on natural gas including two power plants sold to Pacific Gas and Electric, a major utility that will site the power plants at California universities. A 1.4 MW power plant will be located at a municipal-owned pump station and will operate on natural gas. The favorable economic profile of the DFC plant combined with the ability to meet current and future clean air regulations drove the purchasing decision.

*South Korea:* Legislation favorable to fuel cells was passed in March, 2010 by the National Assembly of the Republic of Korea with the adoption of a Renewable Portfolio Standard (RPS) requiring 4 percent clean energy generation by 2015 and 10 percent by 2022. Today, only about one percent of Korea's electricity comes from renewable resources. The South Korean government desires clean distributed generation power sources to support their growing power needs while minimizing additional investment and congestion of the transmission grid. Fuel cells address these needs and are designated as an economic driver due to their ultra-clean emissions, high efficiency and reliable distributed generation capabilities, which will help the Country achieve its RPS and electricity generation goals.

The program, which will become effective in 2012, will mandate 350 MW of additional renewable energy per year through 2016, and 700 megawatts per year through 2022. Carrying forward the policy introduced in 2006 under Korea's feed-in tariff program, the government has elected to designate fuel cells operating on natural gas and biogas as New and Renewable Energy, fully qualifying under the new program.

In response to the new South Korean RPS, POSCO Power began construction of a 100 MW fuel cell stack assembly plant in South Korea in April 2010 with production expected to begin in early 2011. For this facility, POSCO Power procured fuel cell stack module assembly and conditioning equipment through us, which will be used to assemble and condition fuel cell stacks in South Korea using fuel cell components supplied by us.

In 2010, POSCO Power also ordered a 300 kilowatt DFC 300MA fuel cell power plant to develop market applications that target grid support combined with the ability to provide emergency power for installations requiring an uninterrupted supply of power. In the event of temporary interruption of power from the transmission grid, the fuel cell power plant would then switch and provide power to the installation. The South Korean Government is providing financial support for the purchase of this fuel cell power plant and associated development activities.

We have also partnered with POSCO Power to expand the market for fuel cells in South Korea through development of a small-scale Direct FuelCell power plant targeted at the commercial/apartment building market. POSCO Power will fund the development under a joint development agreement announced subsequent to the fiscal year ended October 31, 2010. The \$5.8 million contract will be funded in stages as performance milestones are reached.

*Connecticut:* We continue active discussions with private and government financing sources for the 43.5 MW of fuel cell projects selected and approved by the Connecticut Department of Utility Control. We also received 0.9 MW of orders in Connecticut during fiscal 2010.

*Canada:* The highly efficient Direct FuelCell-Energy Recovery Generation (DFC-ERG) power plant, a joint project with Enbridge Inc., (NYSE: ENB), completed its first year of operation during 2010. The DFC-ERG plant generated very favorable operating results in the first year, having attained an average electrical efficiency of 62.5 percent and equipment up-time of 93 percent. Although its average electrical efficiency of 62.5 percent compares favorably to a typical conventional fossil fuel generation of about 35 to 40 percent, the plant's peak electrical efficiency topped 70 percent in some of the scenarios under which it was evaluated. The system's high electrical efficiency allowed it to reduce greenhouse gas emissions by up to 45 percent compared to a conventional natural gas power plant.

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Our first DFC-ERG power plant went into operation in Toronto in 2008 and four DFC-ERG power plants were approved by the Connecticut Department of Public Utility Control. The potential market size has been estimated at 250 to 350 MW in just the Northeastern U.S., northern California and Toronto, Canada.

In September 2009, the Ontario government ruled that gas distribution companies, such as Enbridge, may own and operate power plants that generate both electricity and heat, including fuel cells operating on natural gas, up to 10 MW per facility. This is an essential step toward the deployment of the DFC-ERG for pipeline applications in the province. The Ontario government is also expected to establish a revised feed-in-tariff to encourage the installation of clean energy generation that would include stationary fuel cells.

#### Government Research and Development Contracts

##### *Advanced Hydrogen Programs:*

A DFC300-H2 power plant has been installed at a wastewater treatment facility in Los Angeles, California to supply 1) hydrogen for use in fuel cell vehicle refueling, 2) clean electricity, and 3) high quality heat for the wastewater treatment process. The plant began operating on natural gas during the fourth quarter of 2010 and is expected to be operational on renewable biogas by early 2011. The demonstration is being performed under sub-contract to Air Products with the majority of funding provided by the U.S. Department of Energy (DOE).

We were awarded approximately \$2.8 million during the fourth quarter of 2010 by the DOE to demonstrate the hydrogen production capacity of a DFC power plant for use by the metal processing industry. A DFC300-H2 will be configured to generate three value streams including: 1) hydrogen for use in a heat treating process, 2) clean electricity, and 3) high quality heat. Over 600 companies operate in the metal processing industry in the USA, representing a significant potential market.

*Hydrogen Compression:* We were awarded approximately \$2.0 million during the fourth quarter of 2010 by the DOE to further develop and demonstrate a highly efficient and reliable method for compressing hydrogen utilizing its solid-state Electrochemical Hydrogen Compressor (EHC) technology. The EHC technology can be utilized to compress hydrogen for storage, transport and subsequent use for vehicle refueling or other industrial applications.

*Solid Oxide Fuel Cell Development:* We continue to partner with Versa Power Systems Inc. (Versa), for the development of a Large Scale Coal-Based Solid Oxide Fuel Cell under the U.S. Department of Energy Solid State Energy Conversion Alliance (SECA) Program. The FuelCell Energy/Versa team met cost and performance objectives for a minimum 25 kW fuel cell stack in Phase II of the program. The full scale advanced fuel cell system to be demonstrated in Phase III is expected to incorporate an SOFC module with an output of up to 250 kW to efficiently convert the energy contained in coal to ultra-clean grid electrical power. We have submitted a bid for approximately \$34 million to the DOE for Phase III and expect a decision in early 2011.

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The continued growth in our backlog and our production run rate is a key part of our ongoing product cost reduction strategy. To date, our cost reduction program has successfully reduced the unit cost of our megawatt-class products by more than 60 percent. Increased volume enables several areas of continued cost reduction, including expansion of our global sourcing program, larger volume purchases, more competition among our suppliers, increased utilization of our factory capacity, and increased productivity and automation in our facilities and supply chain. As a result of product cost reductions, sales volume of 75 to 125 MWs will drive the Company to profitability.

In response to the increased level of domestic orders received in 2010 and anticipating additional orders from POSCO Power, we increased our production run rate to 35 megawatts per year during the fourth quarter of fiscal year 2010.

We are expecting to continue to ramp the business to 50 MW and beyond our existing capacity of 70 MW with continued order flow. Actual production in fiscal 2010 was approximately 22 MW compared to approximately 30 MW in 2009 and approximately 22 MW in 2008. Our overall manufacturing process (module manufacturing, final assembly, testing and conditioning) has a production capacity of 70 MW per year.

With increasing order flow, our plan has been to expand production capacity to 150 MW within our existing Torrington facility. This expansion would require the addition of equipment (e.g. furnaces, tape casting and other equipment) to increase the capacity of certain operations. Due to the economies of scale and equipment required, we believe it is more cost effective to add capacity in large blocks. We estimate that the expansion to 150 MW will require additional capital investments of \$35 to \$45 million although, this expansion may occur in stages depending on the level of market demand.

We also believe that if order flow is slower, we may be able to increase our existing capacity with lower investment. By investing \$5 to \$7 million, maximizing existing assets, operating at full capacity (e.g. multiple shifts 24 hours per day) and making other improvements, we estimate that we can increase capacity from 70 MW to 90 MW of annual production. Depending on product mix, which would include full power plants, we may be able to reach profitability at 80 to 90 MWs of annual production.

#### *Backlog*

Backlog refers to the aggregate revenues remaining to be earned at a specified date under contracts we have entered into. Revenue backlog is as follows:

Total product sales and service backlog was \$154.3 million at October 31, 2010 compared to \$90.7 million as of October 31, 2009. Product order backlog was \$87.2 million and \$66.4 million as of October 31, 2010 and 2009, respectively, representing 33.5 MW and 43.7 MW as of October 31, 2010 and October 31, 2009, respectively. Product orders represent 55 percent of our total funded backlog as of October 31, 2010. Backlog for long-term service agreements was \$67.1 million and \$24.3 million as of October 31, 2010 and 2009, respectively. Although backlog reflects business that is considered firm, cancellations or scope adjustments may occur and will be reflected in our backlog when known.

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For research and development contracts, we include the total contract value including any unfunded portion of the total contract value in backlog. Research and development contract backlog was \$9.7 million and \$14.2 million as of October 31, 2010 and 2009, respectively. The unfunded portion of our research and development contracts amounted to \$4.4 million and \$10.9 million as of October 31, 2010 and 2009, respectively. Due to the long-term nature of these contracts, fluctuations from year to year are not an indication of any future trend.

As of October 31, 2010 we had contracts for power plants totaling 2.5 MW under PPAs ranging from five to ten years. Revenue under these agreements is recognized as electricity is produced. This revenue is not included in backlog described above.

*Series 1 Preferred Share Obligation*

As previously disclosed, our wholly owned subsidiary (FCE Ltd) had a \$12.5 million obligation originally due to Enbridge on December 31, 2010. The Company and Enbridge have been in negotiations to modify certain terms of the Series 1 preferred share agreement, and have agreed to extend the payment deadline to January 31, 2011 to continue these negotiations. Under the existing terms, FCE Ltd. has the option of meeting this obligation through a cash payment or with unregistered shares of FuelCell Energy, Inc. common stock. We are a guarantor of FCE Ltd's obligations to Enbridge. In the current negotiations, Enbridge is seeking terms that, as proposed, may require payments in excess of those we believe we are obligated to pay. While we intend to achieve the most favorable outcome in light of our obligations under the Series 1 preferred shares, we can not presently predict the final terms of any agreement with Enbridge.

This obligation relates to dividends accrued on the series 1 preferred stock acquired in the 2003 acquisition of Global Thermoelectric, Inc (GTI). This obligation has been reported in temporary equity on the balance sheet as redeemable preferred stock of subsidiary. We acquired Global Thermoelectric due to its expertise in solid oxide fuel cell technology. At the time of the acquisition, Enbridge owned preferred shares in GTI.

*Revolving Credit Facility*

In January 2011, we entered into a \$5.0 million revolving credit facility with JPMorgan Chase Bank, N.A. and the Export-Import Bank of the United States. The credit facility is to be used for working capital to finance the manufacture and production and subsequent export sale of our products or services. The agreement has a one year term with renewal provisions. The outstanding principal balance of the facility will bear interest, at our option, of either the one-month LIBOR plus 1.5 percent or the prime rate of JPMorgan Chase. The facility is secured by certain working capital assets and general intangibles, up to the amount of the outstanding facility balance.

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**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

Exhibit No.	Description
1.1	Placement Agent Agreement, dated January 10, 2011 between FuelCell Energy, Inc. and Lazard Capital Markets LLC
5.1	Opinion of Robinson & Cole LLP
10.1	Form of Subscription Agreement
10.2	Form of Warrant
99.1	FuelCell Energy, Inc., Press Release, issued January 10, 2011

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

FUELCELL ENERGY, INC.

Date: January 10, 2011

By: /s/ Joseph G. Mahler  
Joseph G. Mahler  
Senior Vice President, Chief Financial  
Officer,  
Corporate Secretary and Treasurer

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**EXHIBIT INDEX**

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