

FUELCELL ENERGY INC  
Form S-1/A  
March 14, 2005

As Filed with the Securities and Exchange Commission on March 14, 2005.

REGISTRATION NO. 333-122241

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

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**AMENDMENT NO. 1 TO**

**FORM S-1**

**REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**FUELCELL ENERGY, INC.**

*(Exact Name of Registrant as Specified in Its Charter)*

**Delaware**

*(State or Other Jurisdiction of Incorporation or Organization)*

**3629**

*(Primary Standard Industrial Classification Code Number)*

**06-0853042**

*(I.R.S. Employer Identification Number)*

3 Great Pasture Road  
Danbury, Connecticut 06813  
(203) 825-6000

*(Address, Including Zip Code, and Telephone Number, Including Area Code,  
of Registrant's Principal Executive Offices)*

**Jerry D. Leitman  
President**

**FuelCell Energy, Inc.  
3 Great Pasture Road  
Danbury, Connecticut 06813  
(203) 825-6000**

*(Name, Address, Including Zip Code, and Telephone Number,  
Including Area Code, of Agent for Service)*

Copies of All Communications to:

**Richard A. Krantz, Esq.**  
**Robinson & Cole LLP**  
**Financial Centre**  
**695 East Main Street**  
**Stamford, Connecticut 06904**  
**(203) 462-7500**

Approximate Date of Commencement of Proposed Sale to the Public: From time to time after the effective date of this registration statement.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. .

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box.

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## CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to Be Registered	Amount To Be Registered	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
5% Series B Cumulative Convertible Perpetual Preferred Stock	60,250	\$ 1,000 <sup>(1)</sup>	\$ 60,250,000 <sup>(1)</sup>	7,091.43 <sup>(1)(4)</sup>
Common Stock	5,127,648 <sup>(2)</sup>	----- <sup>(3)</sup>	----- <sup>(3)</sup>	----- <sup>(3)</sup>

<sup>(1)</sup> The Registrant is hereby registering a class of convertible preferred securities and the publicly traded common stock which may be issued upon conversion thereof at the same time. The proposed offering price for the convertible security offered hereby is \$1,000 per share, which is based upon the price offered to the initial purchasers of such convertible securities.

<sup>(2)</sup> Represents the number of shares of the Registrant's common stock that are issuable upon conversion of the 5% Series B Cumulative Convertible Perpetual Preferred Stock ("Series B preferred stock") (i) in a primary offering of such shares to potential transferees of the Series B preferred stock and (ii) in a resale offering of these common shares by the current selling security holders. For purposes of estimating the number of shares of common stock to be included under this registration statement, the Registrant calculated the number of shares issuable upon conversion of the Series B preferred stock based on a conversion rate of 85.1064 shares of common stock for each share of Series B preferred stock. Cash will be paid in lieu of fractional shares resulting from the conversion of the shares of the Series B preferred stock. In addition to the shares set forth in the table, pursuant to Rule 416 under the Securities Act of 1933, as amended, the amount to be registered includes an indeterminate number of shares of common stock issuable upon conversion of the Series B preferred stock, as this amount may be adjusted as a result of among others, stock splits, stock dividends and antidilution provisions.

<sup>(3)</sup> No additional consideration will be received for the shares of common stock issuable upon conversion of the Series B preferred stock and, therefore, no registration fee is required pursuant to Rule 457(i) under the Securities Act of 1933, as amended.

<sup>(4)</sup> Of this amount, \$5,125.84 was previously paid and \$1,965.59 is paid herewith.

**The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.**

**THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THESE SECURITIES MAY NOT BE SOLD UNTIL THE REGISTRATION STATEMENT FILED WITH THE SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.**

**SUBJECT TO COMPLETION, DATED MARCH [\_\_], 2005**

**PROSPECTUS**

**[LOGO]**

60,250 Shares of 5% Series B Cumulative Convertible  
Perpetual Preferred Stock  
and  
5,127,648 Shares of Common Stock, Subject to Adjustment,  
Issuable Upon Conversion of  
5% Series B Cumulative Convertible Perpetual Preferred Stock

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This prospectus relates to 60,250 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock (“Series B preferred stock”) held of record by certain of our shareholders and 5,127,648 shares of our common stock, subject to adjustment, issuable upon conversion of such shares of our Series B preferred stock. These shareholders are referred to as the “selling shareholders” in this prospectus. The shares may be offered and sold from time to time by selling shareholders, and any pledgees, donees, transferees or other successors-in-interest of the shares, through public or private transactions at fixed prices, at prevailing market prices at time of sale, at varying prices determined at time of sale or at negotiated prices. Information regarding the identities of the selling shareholders, the manner in which they acquired or will acquire their shares and the manner in which the shares are being offered and sold is provided in the “Selling Shareholders” and “Plan of Distribution” sections of this prospectus.

We will not receive any of the proceeds from the sale of the shares. We have agreed to bear all of the expenses in connection with the registration and sale of the shares, except for sales commissions.

Our common stock is quoted on the Nasdaq National Market under the symbol “FCEL”. The last reported sale price of our common stock on the Nasdaq National Market on March 9, 2005 was \$11.54 per share. No public market currently exists for shares of our Series B preferred stock. We expect that shares of our Series B preferred stock will be eligible for trading in the Portal Market, the National Association of Securities Dealers’ screen-based automated market for trading of securities eligible for resale under Rule 144A.

For a detailed description of the terms and conditions of the Series B preferred stock, see “Description of Capital Stock - Series B Preferred Stock.”

Our principal executive offices are located at 3 Great Pasture Road, Danbury, Connecticut 06813, and our telephone number is (203) 825-6000.

**Investing in our Series B preferred stock and common stock involves risks. See “Risk Factors” beginning on page 7.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

The date of this prospectus is March [ ], 2005.

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus.

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## FORWARD-LOOKING STATEMENTS

This prospectus includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Words such as “expects,” “anticipates,” “approximates,” “believes,” “estimates,” “intends” and “hopes” and variations of such words and similar expressions are intended to identify such forward-looking statements. We intend such forward-looking statements, all of which are qualified by this statement, to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 and are including this statement for purposes of complying with these safe harbor provisions. We have based these statements on our current expectations and projections about future events. These forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those projected in these statements. These risks and uncertainties include those set forth under “Risk Factors.” The forward-looking statements contained in this prospectus include, among others, statements about:

- the development and commercialization schedule for our fuel cell technology and products;
  - future funding under government research and development contracts;
- the expected cost competitiveness of our fuel cell technology and products;
  - our intellectual property;
  - the timing and availability of our products;
- the electric power supply industry and the distributed generation market;
  - our business strategy; and
- general economic conditions in the electric power supply industry and our target markets.

Except for our ongoing obligations to disclose material information under the federal securities laws, we are not obligated to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this prospectus might not occur.

## ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process or continuous offering process. Under this shelf registration process, the selling shareholders may, from time to time, sell the securities described in this prospectus in one or more offerings. This prospectus provides you with a general description of the securities that may be offered by the selling stockholders. Each time a selling stockholder sells securities, the selling stockholder is required to provide you with this prospectus and, in certain cases, a prospectus supplement containing specific information about the selling stockholder and the terms of the securities being offered. That prospectus supplement may also add, update or change information in this prospectus. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in that prospectus supplement. You should read both this prospectus and any prospectus supplement together with additional information described in the section entitled “Where You Can Find More Information.”





## BACKGROUND

Unless the context otherwise requires, references in this prospectus to “FuelCell,” “we,” “us” and “our” refer to FuelCell Energy, Inc. Direct FuelCell® and DFC® are registered trademarks of FuelCell Energy, Inc.

Information contained in this prospectus concerning the electric power supply industry and the distributed generation market, our general expectations concerning this industry and this market, and our position within this industry are based on market research, industry publications, other publicly available information and on assumptions made by us based on this information and our knowledge of this industry and this market, which we believe to be reasonable. Although we believe that the market research, industry publications and other publicly available information are reliable, including the sources that we cite in this prospectus, they have not been independently verified by us and, accordingly, we cannot assure you that such information is accurate in all material respects. Our estimates, particularly as they relate to our general expectations concerning the electric power supply industry and the distributed generation market, involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading entitled “Risk Factors”.

We define distributed generation as small (typically 50 MW or less) electric generation plants (combustion-based such as engines and turbines as well as non-combustion-based such as fuel cells) located at or near the end use customer. This is contrasted with central generation that we define as large power plants (typically hundreds to 1,000 megawatts or larger) that deliver electricity to end users through a comprehensive transmission and distribution system.

As used in this prospectus, 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, “efficiency” or “electrical efficiency” means the ratio of the electrical energy (AC) generated in the conversion of a fuel to the total energy contained in the fuel (lower heating value, the standard for power plant generation, which assumes the water in the product is in vapor form; as opposed to higher heating value, which assumes the water in the product is in the liquid form); “overall energy efficiency” refers to efficiency based on the electrical output plus useful heat output of the power plant; “kilowatt” (kW) means 1,000 watts; “megawatt” (MW) means 1,000,000 watts; “gigawatt” (GW) means 1,000,000,000 watts; “terawatt” (TW) means 1,000,000,000,000 watts; “kilowatt hour” (kWh) is equal to 1 kW of power supplied to or taken from an electric circuit steadily for one hour; “megawatt hour” (MWh) is equal to 1 MW of power supplied to or taken from an electric circuit steadily for one hour; “gigawatt hour” (GWh) is equal to 1 GW of power supplied to or taken from an electric circuit steadily for one hour; “terawatt hour” (TWh) is equal to 1 TW of power supplied to or taken from an electric circuit steadily for one hour; and “MMBtu” is equal to one million British Thermal Unit (the amount of heat necessary to raise one pound of pure water from 59°F to 60 °F at a specified constant pressure).

All dollar amounts are in U.S. dollars unless otherwise noted.

### **Additional technical terms and definitions:**

**Availability** -An industry standard (IEEE (The Institute of Electrical and Electronics Engineers) 762, "Definitions for Use in Reporting Electric Generating Unit Reliability, Availability and Productivity") used to compute total operating period hours less the amount of time a power plant is not producing electricity due to planned or unplanned maintenance. "Availability" percentage is calculated as total operating hours since commercial acceptance date (mutually agreed upon time period when our DFC power plants have operated at a specific output level for a specified period of time) less hours not producing electricity due to planned and unplanned maintenance divided by total period hours. Grid disturbances, force majeure events and site specific issues such as a lack of available fuel supply or customer infrastructure repair do not penalize the calculation of availability according to this standard.

**Co-generation Configuration** - A power plant configuration featuring simultaneous on-site generation of electricity and recovery of waste heat to produce process steam or hot water, or to use heat for space heating.

**Ceramic Electrolyte** - An active fuel cell component placed between the anode and cathode electrodes in a ceramic (SOFC) fuel cell, in which current is carried by the movement of oxide ions.

**Cathode** - An active fuel cell component functioning as a positive (electrically) electrode, where reduction of oxidant occurs. Also referred to as “Oxidant Electrode”.

**Anode** - An active fuel cell component functioning as a negative electrode, where oxidation of fuel occurs. Also referred to as “fuel electrode”.

**Metallic Bipolar Plates** - The conductive plates used in a fuel cell stack to provide electrical continuity from active components of one cell to those in an adjacent cell. The plates also provide isolation of fuel and air fed to the fuel cell.

**Anaerobic Digester Gas** - Fuel gas (rich in methane) produced in biomass digesters employing bacterial and controlled oxygen environment, in a municipal or an industrial wastewater treatment facility.

**Humid Flue Gas** - Exhaust gas from fuel cell and other power plants or a furnace. The gas typically contains humidity (moisture).

**Reforming** - Catalytic conversion of hydrocarbon fuel (such as pipeline natural gas) to hydrogen-rich gas, using steam. The hydrogen-rich gas serves as a fuel for the electrochemical reaction.

**Synthesis Gas** - A gas mixture of hydrogen and carbon monoxide generally derived from gasification of coal or other biomass. It can serve as a fuel for the fuel cell after any required fuel clean up.

**Microturbine** - A gas turbine limited in power output to less than 200 kW. Microturbines are characterized by low-pressure ratios (less than 5) and high-speed alternators. Waste heat from fuel cell may be fed to a microturbine to generate additional electricity. This system is referred to as “Hybrid” power plant.

## SUMMARY

*This summary highlights information contained elsewhere in this prospectus and does not contain all of the information you should consider in making your investment decision. You should read this summary together with the more detailed information, including our financial statements and the related notes, included elsewhere in this prospectus. You should carefully consider, among other things, the matters discussed in the section entitled "Risk Factors."*

### **FuelCell Energy, Inc.**

We are a leader in the development and manufacture of fuel cell power plants for clean, efficient and reliable electric power generation. We have been developing fuel cell technology since our founding in 1969. We are currently commercializing our core carbonate fuel cell products and continuing to develop our next generation of fuel cell products.

Our executive offices are located at 3 Great Pasture Road, Danbury, Connecticut 06813. Our telephone number is (203) 825-6000. We maintain a web site at the following Internet address: [www.fuelcellenergy.com](http://www.fuelcellenergy.com). The information on our web site is not part of this prospectus.

### **Direct FuelCell (DFC) Power Plants**

Our proprietary DFC power plants electrochemically produce electricity from readily available hydrocarbon fuels such as natural gas and wastewater treatment gas. Our current commercial products, the DFC 300A, DFC 1500 and DFC 3000, are rated in capacity at 250 kW, 1 MW and 2 MW, respectively, and are scalable for distributed applications up to 50 MW. Our DFC products are designed to meet the base load power requirements of a wide range of commercial and industrial customers, including wastewater treatment plants, data centers, manufacturing and industrial facilities, office buildings, hospitals, universities and hotels, as well as for use in grid support applications for utility customers. In addition, our DFC products produce high quality by-product heat energy that can be harnessed for combined heat and power (CHP) applications. Through January 10, 2005, over 55 million kWh of electricity has been generated from power plants incorporating our DFC technology at customer sites throughout the world.

Our primary focus is carbonate fuel cell technology, which we have advanced from the laboratory into standard DFC products. We believe we have established a leading position for our DFC products in the commercial distributed generation marketplace due to a number of factors, including:

- We are selling 'ultra-clean' high-temperature fuel cell power plants for stationary base load power, which provide high fuel efficiency and high-value waste heat for cogeneration applications.
- We have strong global distribution partners, including original equipment manufactures (OEMs) and energy service companies (ESCOs), with expertise in selling and marketing energy products and services to commercial and industrial customers worldwide.
  - We obtained commercial product certifications for safety, interconnection, installation and performance.
- We are operating a fleet of DFC power plants at customer sites throughout the world, with a backlog that we expect will double the fleet in service in the next 12-18 months.
- We have established production facilities, with equipment in place to produce 50 MW of DFC products annually.



- We achieved our 2004 value-engineering cost reduction target of 25 percent and are confident we can continue to reduce costs.
  - We have expanded our sales and service capabilities to support our DFC products.
- We have a strong balance sheet, with over \$240 million in cash, cash equivalents and investments (U.S. Treasury Securities) as of November 18, 2004 to support our growth.

Strategically, we are focused on developing sustainable markets targeting customer applications with the greatest opportunity for multiple and repeat orders. Our success will depend in part on reducing product cost and increasing operating experience for our core DFC products. By reducing component costs and improving fuel cell stack output, we believe we can lower the overall cost of electricity generated by our products enabling the price of our DFC power plants to be competitive with existing technologies. As more units are delivered, operating hours will increase, which should allow us to refine our products, our manufacturing processes and our marketing efforts. As a result of successes to date and initiatives under way, we believe we can achieve operating break-even at annual production volumes of approximately 100 MW. Our production volume was approximately 6 MW for the fiscal year ended October 31, 2004.

### **Solid Oxide Fuel Cells**

In April 2003, we were selected by the Department of Energy (DOE) to lead a project team for its 10-year, \$139 million Solid State Energy Conversion Alliance (SECA) program. The goal of the SECA program is to accelerate the commercialization of low-cost solid oxide fuel cells (SOFC) for residential, commercial and light industrial applications ranging in product size from 3 kW to 10 kW each for applications up to 100 kW. To strengthen our commercialization capabilities for this contract, we have recently made strategic investments in SOFC technology including our August 2003 investment of \$2.0 million in Versa Power Systems, Inc., (Versa), our November 2003 acquisition of the SOFC operations of Global Thermoelectric Inc. (Global), and our November 2004 transfer of substantially all of our SOFC assets (including those acquired in our acquisition of Global) and operations to Versa in exchange for an additional equity interest in Versa. Versa was formed to produce a range of products for the distributed generation market incorporating its patented reduced temperature SOFC system. If successfully commercialized, these products would be complementary to our larger scale DFC product line.

### **Recent Developments**

On November 3, 2003 we completed our acquisition of Global Thermoelectric Inc. (Global) located in Calgary, Canada. At the time of acquisition, Global had been developing solid oxide fuel cell (SOFC) power plants since 1997 with the goal of commercializing its technology for residential, commercial and light industrial applications ranging in size from 3 to 10 kW. Through its thermoelectric generator (TEG) product line, Global also sold thermoelectric generators for use as a source of electrical power in remote areas.

In connection with the acquisition, we issued, in the aggregate, approximately 8.2 million of our common shares and exchangeable shares (exchangeable shares) issued by FuelCell Energy, Ltd., our wholly-owned Canadian subsidiary (formerly FCE Canada Inc.). We also assumed Global's Series 2 preferred shares. Total co