FUELCELL ENERGY INC
Form 10-K
January 16, 2007

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)
x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: **October 31, 2006**

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 1-14204
FUELCELL ENERGY, INC.
(Exact name of registrant as specified in its charter)

Delaware	**06-0853042**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
3 Great Pasture Road **Danbury, Connecticut**	**06813**
(Address of principal executive offices)	(Zip Code)

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

N/A
(Former name, former address and former fiscal year, if changed since last report)

Securities registered pursuant to Section 12(b) of the Act.
None.

Securities registered pursuant to Section 12(g) of the Act:
Common Stock, $0.0001 Par Value

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K o

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act (Check one):

Large Accelerated Filer o Accelerated Filer x Non-accelerated Filer o

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act).
Yes o No x

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

The aggregate market value of voting and non-voting common equity held by non-affiliates of the registrant known to us as of April 28, 2006 was approximately $587.5 million, which is based on the closing price of $13.13 on April 28, 2006. On January 10, 2007 there were 53,169,234 shares of common stock of the registrant issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE Certain information contained in the registrant's definitive proxy statement relating to its forthcoming 2007 Annual Meeting of Shareholders to be filed not later than 120 days after the end of registrant's fiscal year ended October 31, 2006 is incorporated by reference in Part III of this Annual Report on Form 10-K.

FUELCELL ENERGY, INC.

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Forward-looking Statement Disclaimer

When used in this Report, the words “expects”, “anticipates”, “estimates”, “should”, “will”, “could”, “would”, “may”, and simi expressions are intended to identify forward-looking statements. Such statements relate to 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 technology, and the timing and availability of products under development. These and other forward looking statements contained in this Report are subject to risks and uncertainties, known and unknown, that could cause actual results to differ materially from those forward-looking statements, including, without limitation, general risks associated with product development and introduction, changes in the utility regulatory environment, potential volatility of energy prices, government appropriations, the ability of the government to terminate its development contracts at any time, rapid technological change, and competition, as well as other risks contained under Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Factors That May Affect Future Results” of this Report. We cannot assure you that we will be able to meet any of our development or commercialization schedules, that the government will appropriate the funds anticipated by us under our government contracts, that the government will not exercise its right to terminate any or all of our government contracts, that any of our products or technology, once developed, will be commercially successful, or that we will be able to achieve any other result anticipated in any other forward-looking statement contained herein. The forward-looking statements contained herein speak only as of the date of this Report. Except for ongoing obligations to disclose material information under the federal securities laws, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any such statement to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based.

Background

Information contained in this Report 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 Report, 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 “Factors That May Affect Future Results” in Item 7 of this Report.

We define distributed generation as small (typically 50 megawatts 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 of megawatts to 1,000 megawatts or larger) that deliver electricity to end users through a comprehensive transmission and distribution system.

As used in this Report, 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 Annual Report, “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 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, net of parasitic load; “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; “kilowatt hour” (“kWh”) is equal to 1kW power supplied to or taken from an electric circuit steadily for one hour, and “Btu” is equal to one million British Thermal Unit (the amount of heat necessary to raise one pount of pure water from 59^{o}F to 60^{o}F at a specified constant

pressure).

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

Additional technical terms and definitions:

Alternating Current ("AC") — Electric current where the magnitude and direction of the current varies cyclically, as opposed to ***Direct Current ("DC")***, where the direction of the current stays constant. The usual waveform in an AC power circuit is a sine wave, as this results in the most efficient transmission of energy. AC refers to the form in which energy is delivered to businesses and residences.

Anaerobic Digester Gas - Fuel gas produced in biomass digesters employing bacterial and controlled oxygen environment from municipal, industrial or commercial water treatment facilities.

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

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.

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

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

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

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.

Microturbine - A gas turbine with typical power output ranges of 30 kW to 350 kW. Microturbines are characterized by low-pressure ratios (less than 5) and high-speed alternators.

Nitrogen Oxides ("NOX") — Generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the NOX are colorless and odorless. However, one common pollutant, ***Nitrogen Dioxide ("NO2"),*** along with particles in the air, can often be seen as a reddish-brown layer over many urban areas. NOX form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NOX are motor vehicles, electric utilities, and other industrial, commercial and residential sources that burn fuels.

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

Renewable Portfolio Standards ("RPS") - States seeking to secure cleaner energy sources are setting standards that require utilities provide a certain amount of their electricity from renewable sources such as solar, wind or other biomass-fueled technologies, including fuel cells. These standards are referred to as Renewable Portfolio Standards. There are currently 23 states and the District of Columbia with RPS programs that mandate a certain percentage of their electricity be generated from renewable resources. Fuel cells using biomass fuels qualify as renewable power generation technology in all of these states, and certain states (Connecticut, Hawaii, Maine, New York and Pennsylvania) specify that fuel cells operating on natural gas are eligible under these standards.

Sulfur Oxide ("SOX") - Sulfur oxide refers to any one of the following: sulfur monoxide, sulfur dioxide ("SO2") and sulfur trioxide. SO2 is a byproduct of various industrial processes. Coal and petroleum contain sulfur compounds, and generate SO2 when burned.

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.

Item 1. BUSINESS

OVERVIEW

FuelCell Energy is a world leader in the development and manufacture of fuel cell power plants for ultra-clean, efficient and reliable electric power generation. Our products are designed to meet the 24/7 baseload power needs of commercial, industrial, government and utility customers. To date our products have generated over 150 million kilowatt hours of electricity and we have units operating at over 50 locations around the world.

We have been developing fuel cell technology since our founding in 1969. Our core carbonate fuel cell products ("Direct FuelCell® or DFC® Power Plants") offer stationary power generation applications for customers. In addition to our current commercial products, we continue to develop our next generation of carbonate fuel cell and hybrid products as well as planar solid oxide fuel cell ("SOFC") technology with our own and government research and development funds.

Our proprietary carbonate DFC power plants electrochemically (meaning without combustion) produce electricity directly from readily available hydrocarbon fuels, such as natural gas and biomass fuels. Customers buy fuel cells to improve reliability and reduce cost and emissions.

We believe that compared to other power generation technologies, our products offer significant advantages including:

- Reliable 24/7 baseload power,
- High fuel efficiency,
- Ultra-clean (e.g. virtually zero emissions) quiet operation,
- Lower cost power generation, and
- The ability to site units locally and provide high temperature heat for cogeneration applications.

Typical customers for our products include manufacturers, mission critical institutions such as correction facilities and government installations, hotels and customers who can use waste or byproducts of their operations for fuel such as breweries, food processors and waste water treatment facilities. With increasing demand for renewable and ultraclean power options, and increased volatility and uncertainty in electric markets, our customers gain control of power generation economics, reliability and emissions. Our fuel cells offer flexible siting and easy permitting.

Our DFC power plants are protected by 46 U.S. and 74 international patents and we have also submitted 38 U.S. and 123 international patent applications.

Current Market Dynamics

According to the Energy Information Administration, worldwide electricity demand in 2003 was approximately 15 billion kWh and is expected to more than double by 2030. The market for clean power is strong and growing. Wind and solar installations are expanding rapidly with increasing market demand for renewable and ultraclean power generation. These solutions offer intermittent power generation, in effect, when the wind blows and when the sun is shining. Our ultra-clean products are a 24/7 baseload power solution for this market, a key requirement for commercial, industrial and utility customers.

The market is beginning to recognize the advantages of stationary fuel cell power. Volatile fuel and energy prices, the ratification of the Kyoto Protocol by over 160 countries since 2005, and worldwide efforts to minimize CO2 emissions, greenhouse gases and other harmful emissions with mandates for significant increases in clean electric power generation, are placing greater emphasis on ultra-clean, high efficiency distributed generation products. Electric generation without combustion significantly reduces harmful pollutants such as NOX, SOX and particulates. Higher fuel efficiency results in lower emissions of carbon dioxide, a major contributor of harmful greenhouse gases and also results in less fuel needed per kWh of electricity generated and Btu of heat produced, thereby reducing exposure to volatile natural gas costs and minimizing operating costs.

In 2006, customers ordered 5.05 MW and we shipped 6.75 MW of our products. All orders during the year were multi-unit or MW sized products in our target markets. Custmers included wastewater treatment facilities, universities, hotels, industrial operations and natural gas pipeline applications. In addition to expanding our markets, we have taken a number of steps to ensure that we are prepared to address RPS market opportunities. We engineered a lower cost product for multi-megawatt configurations. We also initiated production process improvements to increase the efficiency of our manufacturing and commissioning operations.

Although we made significant progress in 2006 executing our business plan to reduce costs and increase market share, current market dynamics have resulted in a slow developing sales environment. For example, sales in California, Connecticut and Japan have been impacted by volatile fuel prices and lagging electric rates. In California and Connecticut, this situation has recently improved as higher fuel prices are being incorporated into electric rates. Product sales are also impacted by the current regulatory and political environment. Exit fees, standby charges and interconnect fees continue to limit distributed generation, including fuel cells, in many markets.

We expected Connecticut's Project 100 to move forward in early 2006, but it was delayed nearly a year moving through the regulatory cycle. This program is now moving forward and our partners submitted approximately 99 MW of bids in December 2006 in response to the Connecticut Clean Energy Fund Request for Proposals ("RFP"). Site selections are expected to be announced in March 2007.

Positive regulatory actions were enacted in California and by the U.S. government. In California, the legislature recently passed AB32, a sweeping greenhouse gas bill that requires businesses to reduce greenhouse gas emissions 25% by 2020. This, together with existing environmental regulations and incentives as well as the flexibility inherent in siting our products, create a highly favorable market for fuel cells. In December 2006, a bill was approved that extends the Investment Tax Credit through 2008. These credits apply to projects that create electricity from fuel cells, wind, geothermal, solar and biomass, as well as other alternative energy initiatives and enhance the economics of theses projects.

Value Proposition of Our Products

Customers buy our fuel cells for reliability, cost and environmental demands. There are currently strong incentive programs in our target markets including California and the Northeast in the U.S., Korea and Japan in Asia and Germany in Europe that make the cost of clean power solutions including fuel cells, wind and solar competitive. We believe that with the continued cost reduction of our products and with increased volume that our products are expected to be cost competitive on an unsubsidized basis against the grid and other distributed generation products, such as engines.

Value Proposition - On-Site Power. Stationary fuel cell power plants are an economical alternative to utility-provided power and other distributed generation in on-site power applications. Customers can often produce power with our products for less than the local utility price or other competing distributed generation products. Customers gain the added benefits of quiet operations, improved reliability and lower emissions.

Factoring in the value of the heat used for cogeneration, government incentives, and possible offsets due to emissions credits, the net cost to the end user of our products is approximately $0.10 to $0.12/kWh or less, depending on location and application. We believe this is competitive with grid-delivered electricity and other distributed generation products in the regions in which we compete. We believe that tougher emission standards will increase the cost of competing distributed generation products.

Value Proposition - Utility or RPS. States seeking to secure cleaner energy sources are setting standards that require utilities provide a certain amount of their electricity from renewable sources such as solar, wind, biomass-fueled technologies, and fuel cells. There are currently 23 states and the District of Columbia that have instituted Renewable Portfolio Standards legislation. These markets in the U.S. alone represent a potential for an estimated 25,000 MW. Fuel cells using biomass fuels qualify as renewable power generation technology in all of these states, with five states specifying that fuel cells operating on natural gas are eligible for these initiatives.

As more intermittent power generation sources including wind and solar are added to the electric grid, states and utilities are looking to balance this generation with alternative ultraclean products that can provide power 24/7. Stationary fuel cell power plants can provide 24/7 power to meet the needs of utilities trying to implement RPS initiatives. Fuel cell power plants can also provide power to grid-constrained areas incrementally without large transmission and distribution investments.

Business Strategy

Our business strategy is to expand our leadership position in key markets, build multi-megawatt markets and continue to reduce the costs of our products. A product mix weighted more heavily with MW-class products is our fastest path to achieve profitability. In 2007, our focus will be as follows:

Build on our leadership position in vertical and geographic markets -

- *California* – We are the fuel cell market leader in California where high electricity costs and stringent environmental regulations make our products a compelling value proposition for customers. California extended its Self-Generation Incentive Program (SGIP) to 2012. The SGIP provides annual incentives, at least $80 million in 2007, for which our fuel cell products are eligible.

- *Asia* – Japan and Korea continue to be among our best markets due to high electricity cost, environmental regulations and incentives for fuel cells. In 2006, Korea enacted its first-ever subsidies to promote renewable energy technologies as part of a national carbon dioxide reduction effort. Fuel cells are eligible for the recovery of 28 cents per kWh and 50 MW of generation will qualify for these funds which are intended to drive the installation of megawatt-class power plants.

- *Europe* – The European Union and member countries have various initiatives underway to promote clean energy. New and expanding incentives in Germany and elsewhere could encourage more sales in 2007 and we are well positioned to capitalize on this growth.

Build Multi-Megawatt Markets –

RPS Markets – RPS programs mandate a certain percentage of their electricity be generated from renewable and ultra-clean resources. Our multi-MW products in installations from 2 to 50 MWs and our pipelind applications are well suited to operate in these markets. Near term opportunities, which we are pursuing in these markets are:

- *Connecticut* – FuelCell Energy and its partners submitted nearly 99 MW of multi-megawatt bids to the Connecticut Clean Energy Fund (CCEF) in December 2006. CCEF has announced that its project selections will be announced

in March 2007.

· *Natural Gas Pipeline Applications* – FuelCell Energy sold a 1.2 MW fuel cell power plant to Enbridge, Inc. for inclusion in a Direct FuelCell-Energy Recovery Generation™ (DFC-ERG™) system that generates ultra-clean electricity while recovering energy normally lost during natural gas pipeline operations. The DFC-ERG opens major new market opportunities for the Company worldwide - in North America the initial market is estimated to be 200-300 MW. We are working with Enbridge, Inc. to capture opportunities in this market.

Cost Reduction –

· FuelCell Energy will continue its cost out initiatives to deliver the most competitive and environmentally friendly products in the market. Our cost reduction efforts are now in their fourth year and we have reduced product costs by over 70 percent since the program began. As a result, our largest product (the 2.4 MW DFC3000) has a product cost of $3,250/kW, which is close to market clearing prices and could benefit from additional volume that could reduce the cost another 10 to 20 percent in 2007 without further design changes.

· The DFC300MA and DFC1500MA are targeted to achieve 20 percent cost reductions in 2007 through improvements in strategic sourcing, value engineering and operations in 2007.

· We are also working toward additional power output increases and improvements to stack life which are expected to result in lower costs across the entire product line.

At a sustained annual order and production volume of approximately 35 MW to 50 MW, depending on product mix, geographic location and other variables such as fuel prices, we believe we can reach gross margin breakeven. We believe that net income break-even can be achieved at a sustained annual order and volume production of approximately 75-100 MW. Since the cost of our 2.4 MW product is currently at market clearing prices in certain target markets such as Connecticut, profitability could be achieved on lower production volumes if product mix trends more toward MW and multi-MW orders.

PRODUCTS

Direct FuelCell® (DFC®) Power Plants

Our core products, the DFC300MA, DFC1500MA and DFC3000, are currently rated in capacity at 300 kW, 1.2 MW and 2.4 MW, respectively and are designed for applications up to 50 MW. Our products are designed to meet the baseload power requirements of a wide range of customers including wastewater treatment plants (municipal, such as sewage treatment facilities, and industrial, such as breweries and food processors), hotels, manufacturing facilities, universities, hospitals, telecommunications/data centers, government facilities, as well as grid support applications for utility customers. Our DFC power plants can be part of a total onsite power generation solution for customers, with our high efficiency products providing the baseload power with grid-delivered electricity and intermittent power, such as solar, or less efficient combustion-based equipment providing peaking and load following energy needs. Our products are also ideal to meet the needs of utilities and RPS mandates.

A fuel cell chemically converts a hydrocarbon fuel into electricity without fuel combustion. The primary byproducts of the fuel cell are heat, water and carbon dioxide. There is virtually no SOX or NOX emissions. A fuel cell power plant can be thought of as having two basic segments: the fuel cell stack module, the part that actually produces the electricity, and the balance of plant (“BOP”), which includes various fuel handling and processing equipment, such as pipes and blowers, and electrical interface equipment such as inverters to convert the DC output of the fuel cell to AC.

Conventional fossil fuel based power plants generate electricity by combustion of hydrocarbon fuels, such as coal, oil or natural gas. With reciprocating engines, fuel combustion takes place within the engine that drives a generator that produces electricity. In a gas turbine combined cycle plant, fuels, such as natural gas, are burned in the gas turbine, which drives a generator. The exhaust heat from the gas turbine is used to boil water, which converts to high-pressure steam, which is used to rotate a steam turbine generating additional electricity. The combustion process typically creates emissions of SOX and NOX, carbon monoxide, soot and other air pollutants.

The following table shows industry estimates of the electrical efficiency, operating temperature, expected capacity range and certain other operating characteristics of the principal types of fuel cells being developed for commercial applications:

Fuel Cell Type	**Electrolyte**	**Electrical Efficiency %**	**Operating Temperature ºF**	**Expected Capacity Range**	**By-Product Heat Use**
PEM	Polymer Membrane	30-35	180	5 kW to 250 kW	Warm Water
Phosphoric Acid	Phosphoric Acid	35-40	400	50 kW to 200 kW	Hot Water
Carbonate (Direct FuelCell®)	**Potassium/Lithium Carbonate**	**45-57**	**1200**	**250 kW to 3 MW and larger**	**Hot water or High Pressure Steam**
Solid Oxide (Tubular)	Stabilized Zirconium dioxide Ceramic	45-50	1800	100 kW to 3 MW	Hot water or High Pressure Steam
Solid Oxide (Planar)	Stabilized Zirconium dioxide Ceramic	40-60	1200-1600	3 kW to 1 MW and larger	Hot water or High Pressure Steam

Our carbonate fuel cell, known as the Direct FuelCell, operates at approximately 1200°F. This temperature avoids the use of precious metal electrodes required by lower temperature fuel cells, such as proton exchange membrane (“PEM”) and phosphoric acid, and the more expensive metals and ceramic materials required by higher temperature fuel cells, such as solid oxide. As a result, we are able to use less expensive catalysts and readily available metals in our designs. In addition, our fuel cell produces high quality by-product heat energy (700°F) that can be harnessed for combined heat and power (“CHP”) applications using hot water, steam or chiller water to heat or cool buildings.

Our Direct FuelCell is so named because of its ability to generate electricity directly from a hydrocarbon fuel, such as natural gas or wastewater treatment gas, by reforming the fuel inside the fuel cell to produce hydrogen. We believe that this “one-step” reforming process results in a simpler, more efficient and cost-effective energy conversion system compared with external reforming fuel cells. External reforming fuel cells, such as PEM and phosphoric acid, generally use complex, external fuel processing equipment to convert the fuel into hydrogen. This external equipment increases capital cost and reduces electrical efficiency. Additionally, natural gas and wastewater treatment gas have infrastructures that are already established. Consequently, our DFC products do not need to wait for the development of the hydrogen infrastructure for continued commercialization.

Our Direct FuelCells have been operated using a variety of hydrocarbon fuels, including natural gas, methanol, diesel, biogas, coal gas, coal mine methane and propane. Our commercial DFC power plants currently can achieve an electrical efficiency of between 45 percent and 47 percent. Depending on location, application and load size, a co-generation configuration can reach an overall energy efficiency of between 70 percent and 80 percent.

MARKETS

We have established a leading position in the sale of fuel cell power plants and strengthened our position in 2006 by improving our product performance and availability, reducing costs for our MW and sub-MW products, and expanding repeatable markets for our DFC products.

- Our cumulative fleet availability continues to exceed 90 percent. Many of our units are achieving greater than 95 percent availability at customer sites.

- Seven new orders were received totaling 5.05 MW, with six orders of 600 kW or more and 2 orders of at least 1 MW, in key repeatable markets. Our distribution partner, Marubeni, has also committed, by paying a 10 percent deposit, to another 6 MW of fuel cell products.

Certain of our markets and applications are developing at a faster rate as evidenced by the chart below. Through October 31, 2006, we have installed an aggregate of 18.0 MW and have 10.05 MW in backlog. Geographically, our leading markets are California and Japan, which account for 70 percent of our orders to date. Our leading applications are wastewater treatment facilities and hotels.

There has been increasing support for fuel cell technology. Specific examples include the following:

- The first tax incentives for fuel cell power plants at the U.S. federal level were enacted in August 2005 and provide for a 30 percent investment tax credit (“ITC”) up to $1,000/kW of total project costs, as well as 5 year accelerated depreciation. The bill to extend the ITC through 2008 passed in December 2006.

- State level RPS programs are in place in some states which call for renewable and ultra-clean electric power generation. For example, Connecticut is requiring that 100 MW of renewable/ultra-clean power generation be installed by 2008 and a total of approximately 400 MW by 2010. Currently, 23 states and the District of Columbia have RPS laws on their books of which five specifically make fuel cells using natural gas eligible for credits.

- There are also other subsidy programs that benefit fuel cell market penetration in key markets which we compete. Examples include the California Self Generation Incentive Program which provides annual subsidies greater than $80 million for renewable and ultra-clean distributed generation technologies and a Korean Renewable Portfolio Agreement whereby the Korean government and nine state-run utility companies have agreed to invest over 1 trillion won (approximately $1 billion U.S.) in a renewable energy research and development effort.

Distributed Generation Markets

We believe distributed generation can be a more cost-effective solution than traditional grid-delivered electricity and other distributed generation technologies:

- ***Provides better economics.*** Distributed generation avoids transmission and distribution system investment, reduces line losses, can use the heat by-product from onsite power generation and offers the ability to control energy cost economics through fuel flexibility.

- ***Increases reliability by locating power closer to the end user.*** Onsite power generation bypasses the congested transmission and distribution system, increasing electrical reliability.

- ***Eases congestion in the transmission and distribution system.*** Each kW of onsite power generation removes the same amount from the transmission and distribution system, thereby easing congestion that can cause power outages and hastening the grid recovery after electrical infrastructure problems have been resolved.

· ***Eliminates T&D investments and provides greater capacity utilization in less time.*** Distributed generation can be added in increments that more closely match expected demand in a shorter time frame (weeks to months) compared with traditional central power generating plants and transmission and distribution systems (often 36 months or longer) which require more extensive siting and right of way approvals. Siting distributed generation can defer or avoid altogether massive T&D investment such as unpopular above ground high voltage lines or even more expensive underground high voltage lines.

· ***Enhances security.*** By locating smaller, incremental power plants in dispersed locations closer to energy consumers, distributed generation can reduce dependence on a vulnerable centralized electrical infrastructure.

Our DFC power plants specifically provide the following attributes that provide an advantage over other distributed technologies of similar size:

· ***Higher operational efficiency***. Our DFC power plants currently achieve electrical efficiencies of 45 to 47 percent and have the potential to reach an electrical efficiency of 57 percent and an overall energy efficiency of 70 to 80 percent for CHP applications. This is significantly greater than the fuel efficiency of competing fuel cell and combustion-based technologies of similar size and results in a lower cost per kWh over the life of the power plant.

· ***Lower emissions.*** Our DFC power plants have lower emissions of carbon dioxide, and significantly lower emissions of other harmful pollutants, such as NOX, SOX and particulate matter, than conventional combustion-based power plants. They have been designated ultra-clean by the California Air Resources Board ("CARB"), and our DFC products are certified to CARB 2007 emissions standards. Emissions of fuel cell power plants versus traditional combustion-based power plants as compiled by the DOE/National Energy Technology Laboratory and company product specification sheets are as follows:

	Emissions (Lbs. Per MWh)		
	NOX	**SO_2**	**CO_2**
Average U.S. Fossil Fuel Plant	4.200	9.210	2,017
Microturbine (60 kW)	0.490	0.000	1,862
Small Gas Turbine (250 kW)	0.467	0.000	1,244
Fuel Cell, Single Cycle (DFC)	0.016	0.000	967

· ***Utilize multiple fuels.*** Our DFC power plants can use many fuel sources, such as natural gas, industrial and municipal wastewater treatment gas and coal gas (escaping gas from active and abandoned coal mines as well as synthesis gas processed from coal), thereby enhancing independence from imported oil and allowing customers to have fuel flexibility. Our DFC power plants can provide our customers with an option to choose the cheapest alternative.

· ***Provide end users with greater control of their energy costs.*** Due to the high efficiency of our DFC power plants, end users would typically select to have their firm, 24/7 baseload power needs provided by our ultra-clean products. The cost of utility provided power continues to rise and is subject to large, unpredictable increases. Generating on-site power with hedged fuel and known generating costs resulting from the operation of a DFC power plant give customers a predictable component of their operations that can be budgeted, and controlled.

Geographic Markets

We are focused on markets where local business conditions, incentives and regulations make it advantageous for customers to purchase our products.

North America – California

California has maintained a leadership position in environmental policy. Executive Order S-3-05 enacted in 2005 set state reduction levels for greenhouse gasses and the California Air Resources Board Standard for 2007 ("CARB 2007") set limits for other emissions (i.e. NOX, SOX, particulates, etc.). These regulations help promote technologies such as fuel cells for clean distributed power generation. Our DFC power plants meet these strict emissions requirements and have been designated as an ultra-clean distributed generation technology. As a result, customers have access to certain incentive funding for the purchase of our DFC power plants and are exempt from exit fees and stand-by charges. In

addition, end users of fuel cell power plants are eligible to sell back unused power to publicly owned utilities at wholesale or generation-based rates.

The California Self Generation Incentive Program provides annual incentives of at least $80 million for renewable and ultra-clean distributed generation technologies. Our DFC power plants operating on natural gas are eligible for a subsidy of up to $2,500/kW and our DFC power plants operating on biomass renewable fuels, such as anaerobic digester gas from wastewater treatment facilities, are eligible for a subsidy of up to $4,500/kW. This program has been extended through 2012.

North America – U.S. RPS and Northeastern States

States seeking to secure cleaner energy sources are setting standards that require that utilities provide a certain amount of their electricity from renewable sources such as solar, wind or other biomass-fueled technologies, as well as 'ultra-clean' fuel cells. Currently, 23 states and the District of Columbia have RPS laws on their books. Fuel cells using biomass fuels qualify as renewable power generation technology in all of these states, and five states specify fuel cells operating on natural gas as eligible for these initiatives.

Connecticut has enacted legislation requiring the state's utility distribution companies to procure approximately 400 MW of clean energy sources by 2010. In addition, 100 MW of generation from renewable technologies must be in place by 2008 ("Project 100"). Fuel cell power plants principally manufactured in Connecticut have an advantage against other project competition as they are entitled to the available air emissions credits and tax credits attributable to the project and no less than 50 percent of the energy credits in the Class I renewable energy credits attributable to the project. For other Class I renewable energy technologies, these credits are allocated to the utility to be used to reduce costs to ratepayers.

New York has adopted an energy policy requiring up to 3,700 MW of new generation from renewable technology by 2013. New York State issued its first request for proposal ("RFP") under this program in 2004 and is expected to issue additional requests for proposals in 2007 focused on customer sited projects as well as large utility size projects.

North America – Canada

Canada has ratified the Kyoto Protocol and is also focused on reducing emissions such as NOX and SOX in selected regions. Our distribution partner, Enbridge Inc., is currently seeking to have our products included in a portfolio to replace more than 500 MW of coal power to help meet the Canadian Government's Kyoto Protocol carbon dioxide and other emissions reduction commitments. These projects would compete with other low impact generation technologies (like solar and some wind) for funding through the country's Cdn.$250 million Sustainable Development Technology Corporation Program and other similar Federal and Provincial programs. In addition, we are jointly developing with Enbridge the DFC ERG product, a specifically designed product for natural gas pipeline applications, with a market potential of over 40 MW in the greater Toronto area and over 200 MW in the Northeast U.S. and California.

Asia – Japan

The key drivers for clean distributed power generation in Japan are high electricity prices, the lack of significant domestic natural energy sources, and the adoption of the Kyoto Protocol. In response, Japanese companies are maximizing the energy efficiency of their operations and reducing the emissions of greenhouse gases. Additionally, government regulations require the use of biomass fuels from wastewater treatment facilities. The high efficiency of our products can provide lower energy costs and reduced carbon dioxide emissions, and the fuel flexibility of our products allows operation using biomass fuel. These factors create several market opportunities in Japan.

Japan has instituted a number of incentive programs. The recently introduced Biomass Nippon program administered by the Ministry of Agriculture, Forestry, and Fisheries provides 33 percent incentive funding for local governments or private companies installing power generation facilities. The Ministry of Land, Infrastructure and Transport ("MLIT") provides 55 percent subsidies to local governments who install equipment to generate power at wastewater treatment facilities. A national RPS program for the power generation sector was adopted in 2004 with initial targets of approximately 3,500 MW by 2010. Our DFC products qualify under these programs.

Working with our distribution partner, Marubeni Corporation, we have installed or in backlog 7.25 MW for the Japanese market. Applications include wastewater treatment and manufacturing for several well known companies such as Sharp Electronics, Seiko Epson and Kirin Brewery. As grid electricity continues to be costly in Japan, and our product costs continue to decline, we expect Japan to be a strong market for our fuel cells.

Asia – Korea

In 2004, the Korean government identified fuel cells as one of the 10 economic growth engines for the Korean economy. POSCO, our distribution partner, was selected to develop and commercialize large stationary fuel cell power plants. The Korean government's goal is to install 300 stationary fuel cell power plants, sized 250 kW to 1 MW, by 2012, and has designated $1.6 billion to support this effort.

The Korean government and nine state-run utility companies have agreed to invest over 1 trillion won (approximately $1 billion U.S.) in a renewable energy research and development effort designated as the Renewable Portfolio Agreement ("RPA"). Korea's Ministry of Commerce, Industry and Energy has stated that the RPA signed seeks to generate enough new power from renewable sources to replace approximately 1.6 million barrels of crude oil. During 2006, Korea followed up these initiatives by instituting a $0.28/kWh incentive to encourage end-users to use power from renewable sources.

POSCO and the Korea South-East Power Company ("KOSEP") have announced an alliance to market and develop fuel cell power plants based on our DFC products as a means to fulfill the RPA requirements As part of this alliance agreement, KOSEP has recently installed one of our DFC300MA units at its plant in Bundang, Gyeonggi province. Currently, we have three units operating in Korea at Chosun University, Tancheon Sewage Treatment Plant and at POSCO's Research Institute of Science and Technology (RIST) in Pohang, POSCO itself, representing 1 MW of installations in Korea. We believe that our partnership with POSCO combined with the $0.28/kWh incentive makes this Korea an excellent market for our fuel cells.

Europe

The European Union ("EU") imports 50 percent of its energy and projects that 65 percent of its total energy requirements will be imported by 2030. Interest in nuclear power, which currently accounts for 13 percent of generating capacity, has declined amid safety concerns in recent years, with several EU counties recently announcing a phase-out of their nuclear programs. The emphasis remains on reducing carbon dioxide emissions and grid-connected CHP projects are encouraged. Under the Kyoto Protocol, the EU is obligated to reduce its greenhouse gas emissions by 8 percent from 1990 levels by 2008 to 2012. In a report dated January 10, 2007, the Commission of the European Communities recommended reducing greenhouse gas emissions by 20 to 30 percent of 1990 levels by 2020. The report cited three reasons: (1) energy production accounts for 80 percent of all greenhouse gas emissions in Europe, (2) such a reduction will limit Europe's exposure to volatile energy prices, and (3) this plan could lead to more innovative power generation technology and more jobs.

MTU CFC Solutions GmbH, our partner, has exclusive distribution rights for our DFC products in Europe. Their strategy is to seed the market with sub-MW units, and lobby the EU and German government for increased subsidies to further market penetration, and then expand production as costs approach market clearing prices. Several subsidy

programs have been implemented. In January 2005, the EU instituted the EU Emissions Trading Scheme (ETS), under which approximately 12,000 large industrial plants in the EU have been able to buy and sell permits to release carbon dioxide into the atmosphere. The ETS enables companies exceeding individual carbon dioxide emissions targets to buy allowances from greener ones. In Germany, a CHP Law was enacted in 2002 that provides a €0.0511/kWh subsidy payable for 10 years for grid-connected CHP power plants, up to 2 MW. MTU CFC believes that these subsidies along with others that are being contemplated will help to increase sales in the European market.

Applications

Within these geographic markets, we are targeting applications that we believe have the best potential for repeatable business for our products:

- ***Wastewater treatment plants***. For wastewater treatment applications, the methane generated from the anaerobic gas digestion process is used as fuel for the DFC power plant, which generates the electricity to operate the wastewater treatment equipment at the facility or for the grid. Through December 31, 2006, we have installed or have in backlog a total of 5.85 megawatts. Representative installations include:

  - *City of Tulare, California (digester gas, 750 kW)*
  - *Sierra Nevada Brewing Company, California (Natural / digester gas, 1 MW)*
  - *LA County Sanitation Palmdale Waste Water Treatment Plant (digester gas, 250 kW)*
  - *Kirin Brewery, Japan (Natural gas/ propane, 250 kW).*

- ***Hotels***. Hotels, with their stable baseload heat and power demand profile, are ideal applications for our DFC power plants. A 300-room suburban hotel typically has a baseload power requirement of 250 kW. Through December 31, 2006, we have installed or have in backlog 3.50 MW. Representative installations include:

  - *Sheraton San Diego Hotel & Marina, California (1.5 MW).*
  - *Westin San Francisco Airport, California (500 kW).*
  - *Sheraton New York Hotel and Towers, New York (250 kW).*

- ***Industrial – Manufacturing***. Manufacturing companies are also a great application for our combined heat and power fuel cell systems. Through December 31, 2006, we have installed or have in backlog 4.0 MW. Representative installations include:

  - *Gills Onions, California (500 kW)*
  - *NGK, Korea (Ceramics kiln, 250 kW).*

- ***Institutional – Universities***. Universities are excellent combined heat and power applications as many have their own independent grid. In the U.S., there are over 1,000 universities with an average generating capacity of approximately 7 MW. Through December 31, 2006, we have installed or have in backlog 2.5 MW. Representative installations include:

  - *California State University, Northridge (1 MW)*
  - *State University of New York - Environmental Science and Forestry, New York (250 kW)*
  - *Pohang University, Korea (250 kW).*

- ***Institutional – Hospitals***. Hospitals are an excellent combined heat and power application, with a critical need for reliable, baseload heat and power for 24/7 operation and the grid for backup. A 300-bed hospital has a typical baseload power requirement of 2 MW. Through December 31, 2006, we have installed or have

in backlog 1.25 MW. Representative installations include (all 250 kW):

· *Chosen University Hospital, Korea*

- *Gruendstadt Clinic, Germany*

- *Bad Berka Hospital, Germany*.

- ***Mission-Critical - Telecommunications/Government.*** Reliability is a key driver for applications at government facilities and telecommunications/data centers. Through December 31, 2006, we have installed or have in backlog 4.5 MW. Representative installations include:

  - *San Francisco Post Office, California (Post Office, 250 kW)*

  - *NTT Sendai, Japan (Telecommunications, 250 kW)*

  - *Santa Rita Correctional Facility, California (Prison, 1 MW).*

- ***Grid Support***. Through December 31, 2006, we have installed or have in backlog 1.75 MW. Representative installations include (all 250 kW):

  - *Los Angeles Headquarters of Water and Power, California*

  - *Salt River Project, Arizona*

  - *RWE Energy Park, Germany*

- ***Natural Gas Pipeline.*** The DFC-ERG power plant is an ultra-clean combined cycle generation system that incorporates our Direct FuelCell power plant and an unfired expansion gas turbine for natural gas pipeline letdown stations. These are stations in the gas distribution system where gas pressure is reduced from the transmission pressure (>500 psi) to local distribution pressures (typically 30 – 60 psi). This pressure reduction is usually done through a pressure letdown valve, and because the gas is cooled by the pressure reduction, it often needs to be heated by combustion-based boilers to prevent freezing. The DFC-ERG combines an expansion turbine and a DFC fuel cell in an integrated system. The expansion turbine replaces the let-down valve, producing power in the process. The combustion boiler is replaced by waste heat recovered from the DFC, which makes additional power. The high efficiency of the DFC combined with the power recovered from the let-down turbine and the fuel saved by heat recovery result in a system efficiency of approximately 60 percent. Enbridge, Inc. has estimated the North American market for the DFC-ERG to be between 200 and 300 MW.

  - *Enbridge, Inc. has ordered a 1.2MW plant from us which will be used in a DFC-ERG configuration.*

Strategic Alliances and Market Development Agreements

Our original equipment manufacturer (“OEM”) and energy service company (“ESCO”) partners have extensive experience in designing, manufacturing, distributing selling and servicing energy products worldwide. We believe our strength in the development of fuel cell products coupled with their understanding of sophisticated commercial and industrial customers, products and services will enhance the sales, service and product development of our product.

OEM Partners

MTU CFC Solutions GmbH (“MTU CFC”), headquartered in Ottobrunn, Germany, has been a co-developer of our DFC technology since 1989. Our sub-MW power plant is a collaborative effort using our DFC technology and the Hot Module® BOP designed by MTU CFC. As an OEM developer of stationary fuel cell power plants, MTU CFC assembles and stacks the DFC components that we sell to them and then adds their mechanical and electrical balance

of plants for ultimate sale to their customers. In 2006, EQT (a Sweden-based private equity firm), acquired MTU CFC's parent company, MTU Friedrichshafen GmbH, from DaimlerChrysler. There are currently sub-MW fuel cell power plant installations at eleven locations in Europe. The parent company of MTU CFC (MTU Friedrichshafen GmbH) owns approximately 2.7 million shares of our common stock and is represented on our Board of Directors.

Marubeni Corporation. We have installed or have in backlog 8.25 MW in Japan and we currently have a commitment from Marubeni for an additional 6 MW. In 2006, units were installed at Tokyo Gas' new research and development center at Tsurumi, Tokyo, where it is undergoing evaluation and demonstration prior to potentially being offered by Tokyo Gas to its customers via their industrial gas sales division. Four DFC300MA units, totaling 1 MW in output, were also installed at Sharp Ltd.'s "super-green" factory in Kameyama Prefecture, where Sharp manufactures LCD screens for its flat-panel television displays. Notably, the 1 MW fuel cell installation provides base load power to the facility, while 5 MW of Sharp's own photovoltaic (PV) modules provide peaking power. This is an example of the way in which DFC systems can combine with solar power to provide a total solution for ultra-clean renewable power for environmentally leading companies.

In 2006, world-leading ceramics manufacturer NGK Inc. installed one of our DFC300MA systems at its headquarters building and main factory in Nagoya, where NGK manufactures catalytic converters for Toyota Corp. and others. In 2007, the DFC300MA will be integrated with the company's ceramics kiln in a proprietary configuration to boost the overall energy efficiency of the plant. Other installations in Japan include the Tokyo Super Eco Town Project and Kyoto Eco Energy Project, both of which convert food wastes into useful energy; the Kirin Brewery near Tokyo; the City of Fukuoka municipal wastewater treatment facility; Japex's Katakai natural gas gathering station located in the Niigata Prefecture; and two units to Epson's Quartz Device Division in the City of Ina, Nagano Prefecture, Japan.

Marubeni invested $10 million in us in 2001 through the purchase of approximately 268,000 shares of our common stock. In 2004, we issued warrants to purchase 1,000,000 shares of our common stock to Marubeni in conjunction with a revised distribution agreement. As part of these warrant agreements, the warrants vest in separate tranches once Marubeni has ordered totals of between 5 MW and 45 MW of our products. As of October 31, 2006, 800,000 of these warrants had expired. The exercise price of the remaining 200,000 outstanding warrants (which are not vested) is $18.73 per share and the warrants will expire April 2007, if not earned and exercised sooner.

POSCO. In Since November 2004, we and Marubeni Corp. signed an agreement with POSCO to distribute and package DFC power plants in Korea. POSCO has purchased four 250 kW DFC300MA power plants through Marubeni, which are located at the Research Institute of Science and Technology (RIST) in Pohang University, Chosun University Hospital, and Tancheon Wastewater Treatment Facility in Seoul, and at the KOSEP power generating station at Bundang. POSCO has extensive experience in power plant project development, building over 2,400 megawatts of power plants, equivalent to 3.7 percent of Korea's national capacity, for its various facilities. POSCO is a world leader in the materials industry and is one of the world's largest producers of steel.

Caterpillar, Inc. DFC units have been shipped to several commercial customers of Caterpillar including: a municipal wastewater treatment application for the Sanitation Districts of Los Angeles County in Palmdale, California; and the State University of New York College of Environmental Science and Forestry. Caterpillar is currently offering our DFC products to its customers and has stated it intends to offer its own branded fuel cell power plant based on our technology.

Enbridge Inc. Enbridge, a leader in energy transportation and distribution in North America and internationally, expanded our market development agreement to include current DFC product distribution in the US as well as Canada, and to include the new DFC-ERG™ product in North America. In 2005, we issued warrants to Enbridge to purchase up to 1,000,000 shares of our common stock in conjunction with an amended distribution agreement. The warrants vest on a graduated scale based on the total number of megawatts contained in product orders and the timing of when such orders are generated by Enbridge. In October 2006, Enbridge placed an order for the first DFG ERG™, which resulted in vesting of 30,000 warrants with an exercise price of $9.89. The expiration date of these vested warrants is October 31, 2008. The exercise prices of the remaining non-vested 970,000 warrants range from $9.89 to $11.87 per share and the expiration dates range from June 30, 2008 to June 30, 2010, if not earned and exercised sooner.

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Energy Service Company Distribution Partners

We have five Energy Service Company distribution partners:

Alliance Power, Inc. Alliance Power is a developer of distributed generation facilities ranging in size from 1 MW to 49 MW. Alliance has been focusing its efforts in California on customers requiring DFC power plants for baseload combined heat and power applications from 500 kW to 1.5 MW. In 2006, Alliance Power secured orders totaling 3.85 MW, including projects for California State University, Northridge, Gills Onions, the City of Tulare and a California resort.

Chevron Energy Solutions. We entered into an agreement with Chevron Energy Solutions ("Chevron"), a subsidiary of ChevronTexaco, in December 2001, to jointly market and sell DFC power plants, with initial projects targeted for the northeastern U.S. and California. Chevron has sold and installed a 1 MW DFC1500MA power plant in California to Alameda County for the Santa Rita Correctional Facility and a DFC300MA power plant for the U.S. Postal Service's San Francisco Processing and Distribution Center.

Linde Group We entered into a non exclusive agreement with The Linde Group, a worldwide market leader in industrial gases and engineering, to sell and market Direct FuelCell(R) (DFC(R)) power plants worldwide except where FuelCell Energy already has granted exclusive distribution agreements. Linde will focus initially on DFC opportunities in North America that fit into its overall strategy of developing sustainable energy solutions and providing low-carbon distributed generation solutions to industrial, commercial and governmental customers, with longer term plans to leverage this relationship into other geographies where Linde has market leadership.

LOGANEnergy Corp. We entered into an agreement with LOGANEnergy Corp. ("LOGAN") in July 2004 to jointly market and sell DFC power plants. In 2005, we received two orders from LOGAN totaling 750 kW for government training facilities in California - 500 kW for a U.S. Marine Base at Camp Pendleton and the U.S. Marine Corps Air Ground Center at Twentynine Palms.

PPL Energy Plus. PPL Energy Plus ("PPL"), a subsidiary of PPL Corporation, has purchased and installed DFC power plants at three Starwood Resorts properties (Sheraton Edison and Sheraton Parsippany in New Jersey and Sheraton New York Towers in Manhattan); one unit at Ocean County College in New Jersey; and one unit at a Pepperidge Farm Bakery in Bloomfield, Conn.

Customer Partners

We have partnered directly with certain customers who have installed our products. These customer partners have the option to negotiate arrangements for the sale, distribution and service of our DFC power plants upon completion of the project.

Our longest standing customer partner relationship is with the Los Angeles Department of Water and Power ("LADWP"), the largest municipal utility in the U.S. with 640,000 water customers and 1.4 million electric customers. LADWP participated with us on our 2 MW Santa Clara Demonstration Project in 1996-1997 and currently has three DFC 300A power plant installations (grid-connected units at its Main Street facility, headquarters building, and a wastewater treatment plant installation at Terminal Island).

Competition

We compete on the basis of our products' reliability, fuel efficiency, environmental considerations and cost. We believe that our DFC carbonate fuel cell offers competitive and environmental advantages over most other fuel cell designs and other combustion-based technologies for stationary baseload power generation.

Several companies in the U.S. are involved in fuel cell development, although we believe we are the only domestic company engaged in significant manufacturing and commercialization of carbonate fuel cells. Emerging fuel cell technologies (and companies developing them) include PEM fuel cells (Ballard Power Systems, Inc.; UTC Fuel Cells; and Plug Power), phosphoric acid fuel cells (UTC Fuel Cells) and solid oxide fuel cells (Siemens Westinghouse Electric Company; Cummins; SOFCo; General Electric; Delphi; and Acumentrics). Each of these competitors has the potential to capture market share in our target markets.

There are other potential carbonate fuel cell competitors internationally. In Asia, Ishikawajima Harima Heavy Industries is active in developing carbonate fuel cells. In Europe, a company in Italy, Ansaldo Fuel Cells, is actively engaged in carbonate fuel cell development and is a potential competitor. MTU CFC and its partners have been the most active in Europe.

Other than fuel cell developers, we must also compete with such companies as Caterpillar, Cummins Inc., and Detroit Diesel Corporation (a subsidiary of DaimlerChrysler AG), which manufacture more mature combustion-based equipment, including various engines and turbines, and have more established manufacturing, distribution, operating and cost features. Significant competition may also come from gas turbine companies like General Electric, Ingersoll-Rand Company Limited, Solar Turbines Incorporated and Kawasaki, which have recently made progress in improving fuel efficiency and reducing pollution in large-size combined cycle natural gas fueled generators. These companies have made efforts to extend these advantages to smaller sizes. We believe, however, that these smaller gas turbines will not be able to match our fuel efficiency or favorable environmental characteristics.

POWER PURCHASE AGREEMENTS

Power purchase agreements (PPAs) are a common arrangement in the energy industry, whereby a customer purchases energy from an owner and operator of the power generation equipment. A number of our partners enter into PPAs with end use customers, such as Marubeni in Japan and PPL in the U.S., where they purchase DFC power plants from us, own and operate the units, and recognize revenue as energy is sold to the end user.

We have seeded the market with a number of Company funded PPAs to penetrate key target markets and develop operational and transactional experience. To date, we have funded the development and construction of certain fuel cell power plants sited near customers in California, and own and operate 3 MW of assets through PPA entities in which we have an 80% ownership interest. As we enter in to multi-MW projects in the RPS markets and with the

benefit of the federal investment tax credit and accelerated depreciation in the Energy Policy Act of 2005 we believe future PPAs will attract third party financing.

MANUFACTURING AND COST REDUCTION

We have established a 65,000 square foot manufacturing facility in Torrington, Connecticut where we produce our repeating fuel cell components: the anode and cathode electrodes, metallic bipolar plates and the electrolyte matrix. These stack components are combined and assembled into modules that are currently delivered to our test and conditioning facilities in Danbury, Connecticut. Sub-MW modules are combined and tested with the balance of plant to complete our power plants at the customer site. Our MW modules for the DFC1500MA and DFC3000 are tested and conditioned in Danbury and then shipped to the customer site for final testing with an assembled balance of plant.

Our manufacturing, testing and conditioning facilities have equipment in place for a production capacity of 50 MW per year. We believe manufacturing capacity can be increased to 125 - 150 MW within our existing Torrington facility through the addition of parallel production lines and additional machinery. We also have additional land surrounding our Torrington facility, on which we could expand to 400 MW of annual production of our repeating fuel cell components. Expansion of our manufacturing facilities beyond 50 MW would also require new facilities for the fuel cell stack and module assembly, test and conditioning which could be deployed regionally. These regional assembly, test and conditioning facilities are expected to provide additional cost savings as they will reduce shipping costs, enhance delivery times and improve customer service. Our current production volume is 10 MW which will be adjusted depending on customer demand and the emergence of the RPS market.

Our 2 MW Santa Clara ‘proof-of-concept’ project in 1996-1997 cost more than $20,000/kW to produce. In 2003, we shipped our first commercial product, a DFC300 to the Kirin Brewery which cost more than $10,000/kW. At that time, we implemented our commercial cost-out program hiring additional engineers who focused on reducing the total life cycle costs of our power plants. Since 2003, they have made significant progress primarily through value engineering our products and increasing the power output by 20%. Our current manufactured cost of approximately $3,250 /kW on our multi-MW power plant, $4,300/kW on our MW plant and $4,800/kW for the sub-MW product. Reducing product cost is essential for us to further penetrate the market for our high temperature fuel cell products. Cost reductions will lessen and/or eliminate the need for incentive funding programs that are currently available to allow our product pricing to compete with grid-delivered power and other distributed generation technologies, and are critical to us attaining profitability.

In 2006, we primarily focused our cost saving efforts on our multi-MW product, the DFC3000. Significant savings came from “value engineering” – developing lower-cost designs for various elements of the power plant – and improving the efficiency of the Company’s manufacturing, testing and commissioning processes. The cost reduction also resulted from the 20 percent increase in power output in our DFC products announced in August 2006. By improving thermal management of electrochemical activity within the stack, the Company increased the power output from each cell, which produces more electricity from the same basic power plant components.

FuelCell Energy will continue to emphasize its cost out initiatives to deliver the most cost efficient and environmentally friendly power generation solutions and meet the needs of the emerging RPS markets. In 2007, the DFC300MA and DFC1500MA are targeted to achieve another 20 percent cost reduction through improvements in strategic sourcing, value engineering and operations. Increased production volume could also reduce that cost another 10 to 20 percent.

SERVICE AND CUSTOMER SATISFACTION

Our service organization offers comprehensive service and maintenance programs including total fleet management, refurbishment and recycling services, and complete product support including spare parts inventory. We are offering service agreements at various levels for one to 13 years, with flexible renewal options.

FuelCell Energy has invested in a Service Group organization that offers a complete service portfolio for FuelCell Energy's DFC product line. The Service Group's primary task is to maintain a high level of service for our end user customers during the warranty period of the original DFC equipment. In providing the wide range of services required to support the fleet during the warranty period, the Service Group has developed infrastructure that can be easily extended to capture revenue as the units in the field enter the period past the warranty period. In 2006, we achieved revenues of $1.7 million in long-term service agreements and revenue is expected to grow in the years to come.

In providing the range of services required to support the fleet during the warranty and service agreement period, the service organization has developed infrastructure to support its efforts which includes a 24/7 Call Center and a web-based information system network that allows fingertip access to plant performance data. We have also established regional parts warehouses including rotable pool of spare stacks, fully equipped regional field service teams, a stack repair/refurbishment center, testing and conditioning facilities. All personnel complete an operator and maintenance technician training program and work very closely with the engineering and technology support organizations to service our products in the field. This infrastructure has enabled us do diagnosis issues quickly and maintain strong customer satisfaction.

In 2006, we improved the availability of our fleet meeting our customers' expectation for product performance and availability. We have over 50 units installed at customer sites throughout the U.S., Asia and Europe. Through December 31, 2006, we have generated more than 150 million kWhs at customer sites worldwide, with a cumulative fleet availability of over 90 percent.

In 2006, a customer satisfaction survey polling customers that own and operate our DFC units in the U.S. and Japan, solicited feedback on all aspects of our products and services. The Service organization received high ratings from our customers. The customers polled were extremely pleased with the aftermarket and service support that they were receiving and believed that the service provided held exceptional value.

GOVERNMENT RESEARCH AND DEVELOPMENT CONTRACTS

The goal of our research and development efforts is to improve our core DFC products and expand our technology portfolio in complementary high temperature fuel cell systems, such as SOFC. In addition, we are also conducting limited development work on advanced applications for other fuel cell technologies, such as PEM. A significant portion of our research and development has been funded by government contracts and is classified as cost of research and development contracts in our consolidated financial statements. For the fiscal years ended 2006, 2005 and 2004, total research and development expenses, including amounts received from the DOE, other government departments and agencies and our customers, and amounts that have been self-funded, were $22.0 million, $35.0 million and $44.9 million, respectively.

Government Research & Development Contracts

Since 1975, we have worked on the development of our DFC technology with various U.S. government departments and agencies, including the DOE, the Navy, the Coast Guard, the Department of Defense, the Environmental Protection Agency, the Defense Advance Research Projects Agency and the National Aeronautics and Space Administration. Government funding, principally from the DOE, provided approximately 35 percent, 43 percent and 60 percent of our revenue for the fiscal years ended 2006, 2005 and 2004, respectively. From the inception of our carbonate fuel cell development program in the mid-1970s to date, more than $536 million has been invested to

support the development of our DFC technology. This includes approximately $355 million from government agencies, with the balance provided by private entities, utility organizations and licensees.

Significant programs we are currently working on include:

Carbonate Fuel Cell Programs

Direct FuelCell/Turbine. The DOE's Office of Fossil Energy established its Vision 21 Program in 1999 with the objective of developing a "21st Century Energy Plant" that can generate electricity, heat, clean fuels, chemicals and hydrogen from a variety of feedstocks such as fossil fuels and biomass with high efficiency and low environmental impact. The Company was awarded a $19.4 million cost-shared contract to develop a fuel cell / turbine hybrid power plant under this program.

In 2005, we completed the fabrication of an alpha sub-MW power plant by the intregration of a 250kW DFC stack module with a Capstone C60 microturbine. The microturbine supplements the power produced by the fuel cell, increasing the system electrical efficiency. The unit was installed and grid-connected at the Billings Clinic in Billings, Montana and started generating power in April 2006. During approximately 8,000 hours of operation, the unit achieved a record-breaking electrical efficiency of 56 percent, surpassing all distributed generation technologies in this size range. Emissions testing of the DFC/T system demonstrated compliance with the stringent California Air Resources Board's CARB '07 standards.

Subsequent to the success of the DFC/T field demonstration and following the Company's shift to MW scale products, we have initiated the design of a MW-scale hybrid DFC/T.

Dual Fuel Testing at CTC. The ability to operate highly efficient, pollution-free, distributed-generation power plants interchangeably on either natural gas or HD-5 grade propane is of interest to the U.S. Army and other applications as a way to maintain secure power for critical power operations. Propane, a readily available and transportable fuel that can easily be stored on-site, can also be used as a primary fuel to islands, remote sites, national parks, data centers, military bases, hotels, and hospitals. In response to the interest for a fuel flexible power plant, Concurrent Technologies Corporation (CTC), under contract to the U.S. Army Engineering, Research and Development Center's Construction Engineering Research Laboratory (ERDC-CERL), subcontracted with FuelCell Energy (Sept. 2005) to test a DFC300MA power plant on propane at their Johnstown, Pennsylvania location. The purpose of the demonstration was to operate our DFC300MA power plant on HD-5 grade propane as well as natural gas and to switch rapidly between these fuels. This system was designed to enable the generation of ultra-clean baseload electricity even in situations when fuel supplies are threatened due to natural disaster, terrorism or repair outages.

This DFC300MA fuel cell power plant operated on HD-5 propane for eight months in 2006. During this demonstration period the power plant accumulated over 5,000 hours of operation on propane and natural gas generating more than 700 MW hours (MWh) of electricity.

Co-production of Hydrogen and Electricity using DFC Power Plants

Our high temperature DFC power plants produce hydrogen internally from hydrocarbon fuels, and then convert it to electricity. These DFC products are capable of co-production of electricity and hydrogen at potentially attractive costs. This value-added proposition is quite attractive for industrial users of hydrogen in the near term. It also provides a technology bridge to the hydrogen infrastructure being developed by DOE for our nation's energy independence. A recent DOE-sponsored study performed by Air Products and Chemicals, Inc. (APCI), showed that a sub-MW DFC power plant installed at a hydrogen refueling station for fuel cell vehicles can handle a fleet of approximately 200 cars while providing enough electricity to power a community of 200 homes.

During 2005, we were selected by Air Products to develop and demonstrate the Next Generation Hydrogen Energy station. The $10 million cost-shared project, co-sponsored by DOE, APCI and FCE, will integrate our ultra-clean DFC power plant and Air Products' advanced gas separation technology to co-produce hydrogen and electricity at a vehicle refueling station from one single system ("DFC-H_2"). The sub-MW system will be designed to operate on pipeline natural gas and other renewable fuels such as waste-derived biogas. Air Products estimates that the DFC-H_2 system has the potential to be highly efficient and cost competitive with other conventional technologies. Several locations in California are being evaluated for the demonstration of the DFC-H_2 system, presently scheduled to be on-stream in late 2007.

We are also engaged in technology development of an electrochemical hydrogen separator (EHS). Under sponsorship of Connecticut Clean Energy Fund, a subscale EHS stack was designed, built and delivered to University of Connecticut for demonstration in February 2006. The EHS stack has accumulated over six months of stable operation on a variety of test conditions. During 2006, we were selected by U.S. Department of Defense to scale-up its solid-state electrochemical hydrogen separator (EHS) technology to co-produce high purity hydrogen from its DFC power plants. The EHS technology is highly modular, "truly green" and promises over 50 percent reduction in the separation cost. EHS has no moving parts, which leads to enhanced reliability and higher levels of safety needed for the hydrogen infrastructure. The technology scale-up during 2007 will focus on laboratory validation tests of large-area EHS stacks, followed by a sub-megawatt system demonstration in 2008.

DFC Marine/Diesel. We are continuing development of marine applications for our DFC technology under contracts to the U.S. Navy. The marine power plants are required to operate on liquid fuel including diesel. We have a multi-year contract with the Office of Naval Research to develop a 500 kW first generation power plant for demonstration at the Naval Sea Systems Command facility in Philadelphia. We have constructed and verified operation of the balance of plant (BOP) process equipment for the marine DFC power plant. The BOP has been integrated with our commercial DFC module, and the complete power plant is undergoing initial performance testing in Danbury, Connecticut. Following completion of additional testing, the plant is expected to be delivered to Philadelphia during the second quarter of 2007. This $25.4 million cost-shared project commenced in 2000 and is a continuation of an earlier $4.6 million contract that completed the conceptual design and testing of the critical components for the marine fuel cell power module.

We expect that successful demonstration of this project can lead to additional diesel fuel cell power plant applications for commercial ships and remote site power generation.

Solid Oxide Fuel Cell Programs

SECA Program

In September 2006, we completed all the technical requirements for the DOE's Solid State Energy Conversion Alliance ("SECA") Phase I, 3-10 kW solid oxide fuel cell ("SOFC") cost reduction program and entered into a new SECA Phase I program for development of a multi-megawatt SOFC power plant operating on coal syngas (the Large Scale Hybrid Program).

Program technical highlights included demonstration testing of a 3 kW SOFC system for over 2,100 hours that successfully met or exceeded all DOE performance metrics for power output, efficiency and degradation (life). This system was subsequently shipped to the DOE National Energy Technology Laboratory ("NETL") at Morgantown, West Virginia where the unit operated for approximately 1,500 hours confirming the operational results. A factory cost estimate was conducted based on the 3 kW SOFC system design and bill-of-materials which verified that the system cost estimate is less than the DOE SECA program specified phase I program metric of $800/kW.

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Large Scale Hybrid

In February 2006, we were selected by the DOE as a prime contractor for a Phase I award to develop a coal-based, multi-megawatt solid oxide fuel cell-based hybrid system. The contract was finalized in September 2006. The program's overall objective is to develop SOFC technology, fueled by coal synthesis gas (coal gas) that will be used in highly-efficient central generation power plant facilities. The advanced fuel cell-hybrid system will have an overall efficiency of at least 50 percent in converting energy contained in coal to grid electrical power. In contrast, today's average U.S. coal-based power plant has an electrical efficiency of approximately 35 percent. In addition, the envisioned SOFC-hybrid system is expected to separate 90 percent or more of the system's carbon dioxide emissions for capture and environmentally safe disposal while being cost competitive with other baseload power generating technologies.

The first phase of this three phase program will focus on SOFC cell and stack technology scale-up, as well as baseline and proof-of-concept system engineering design and analysis. The project will culminate in phase three with the fabrication and operation of a multi-MW proof-of-concept SOFC-hybrid power plant at FutureGen, a planned DOE demonstration of advanced power systems that emit near-zero emissions, doubling today's electric generating efficiency, co-produce hydrogen, and sequester carbon dioxide or at another suitable location using coal-derived synthesis gas as the fuel. Phase I of the program is a two-year, $36.2 million cost-shared program. If selected for subsequent phases, total project funding of approximately $180 million is anticipated.

We are the prime contractor on this program and other team members include: Versa Power Systems, Inc., Gas Technology Institute ("GTI"), Nexant, Inc., WorleyParsons Group Inc., and SatCon Technology Corporation.

GOVERNMENT REGULATION

We presently are, and our fuel cell power plants will be, subject to various federal, state and local laws and regulations relating to, among other things, land use, safe working conditions, handling and disposal of hazardous and potentially hazardous substances and emissions of pollutants into the atmosphere. Emissions of SOX and NOX from our fuel cell power plants are much lower than conventional combustion-based generating stations, and are well within existing and proposed regulatory limits. The primary emissions from our DFC power plants, assuming no cogeneration application, is humid flue gas that is discharged at a temperature of approximately 700-800° F, water that is discharged at a temperature of approximately 10-20° F above ambient air temperatures and carbon dioxide. In light of the high temperature of the gas emissions, we are required by regulatory authorities to site or configure our power plants in a way that will allow the gas to be vented at acceptable and safe distances. The discharge of water from our power plants requires permits that depend on whether the water is permitted to be discharged into a storm drain or into the local wastewater system. Lastly, as with any use of hydrocarbon fuel, the discharge of particulates must meet emissions standards. While our products have very low carbon monoxide emissions, there could be additional permitting requirements in smog non-attainment areas with respect to carbon monoxide if a number of our units are aggregated together.

We are also subject to federal, state, provincial or local regulation with respect to, among other things, emissions and siting. In addition, utility companies and several states have created and adopted or are in the process of creating interconnection regulations covering both technical and financial requirements for interconnection to utility grids.

PROPRIETARY RIGHTS AND LICENSED TECHNOLOGY

To compete in the marketplace, align effectively with business partners and protect our proprietary rights, we rely primarily on a combination of trade secrets, patents, confidentiality procedures and agreements and patent assignment agreements. In this regard, we have 46 current U.S. patents and 74 international patents covering our fuel cell technology (in certain cases covering the same technology in multiple jurisdictions). All of the 46 U.S. patents relate to our Direct FuelCell technology. We also have submitted 38 U.S. and 123 international patent applications.

The patents we have obtained will expire between 2008 and 2024, and the current average remaining life of our patents is approximately 11.4 years. In 2006, three new U.S patents were issued. In fiscal 2006, six U.S. patents expired. The expiration of these patents has no material impact on our current or anticipated operations. We also have approximately 30 invention disclosures in process with our patent counsel that may result in additional patent applications.

Many of our U.S. patents are the result of government-funded research and development programs, including the DOE cooperative agreement. Three of our patents, which resulted from government-funded research before January 1988 (when we qualified as a “small business”), are owned by the U.S. government and have been licensed to us.

U.S. patents that we own that resulted from government-funded research are subject to the government exercising “march-in” rights. We believe, however, that the likelihood of the U.S. government exercising these rights is remote and would only occur if we ceased our commercialization efforts and there was a compelling national need to use the patents.

We have also entered into certain license agreements through which we have obtained the rights to use technology developed under joint projects. Through these agreements we must make certain royalty payments on the sales of products that contain the licensed technology, subject to certain milestones and limitations.

We have two agreements with MTU CFC; a Cell License Agreement and a Balance of Plant License Agreement. Under our current Cell License Agreement, which has been extended through December 2009, we license our DFC technology to MTU CFC for use exclusively in Europe and the Middle East and non-exclusively in Africa and South America. We also sell our DFC components and stacks to MTU CFC under this agreement. Under the Cell License Agreement, MTU CFC also granted us an exclusive, royalty-free license to use any of their existing improvements to our Direct FuelCell that MTU CFC developed as of December 1999 under a previous license agreement. In addition, MTU CFC has agreed to negotiate a license grant of any separate carbonate fuel cell know-how it develops during the term of the current Cell License once it is ready for commercialization. Under our Balance of Plant Cross Licensing and Cross-Selling Agreement, we may sell to MTU CFC our MW-class modules and MTU CFC may sell their sub-MW class modules to us. The Balance of Plant License continues through July 2008 and may be extended for up to three additional 5-year terms, at the option of either MTU CFC or us.

REVENUE AND BACKLOG

Our consolidated revenues for the years ended October 31, 2006, 2005 and 2004 were $33.3 million, $30.4 million and $31.4 million, respectively. These consolidated revenues included product sales and revenues of $21.5 million, $17.4 million and $12.6 million, respectively, and revenues from research and development contracts of $11.8 million, $13.0 million and $18.8 million, respectively. Consolidated revenues for the years ended October 31, 2006, 2005 and 2004 in the U.S. were $27.5 million, $22.2 million and $23.4 million, respectively, and consolidated revenues from foreign locations were $5.8 million, $8.2 million and $8.0 million, respectively, based on customer order location.

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Our backlog as of October 31, 2006 was approximately $58.0 million compared with backlog of approximately $42.2 million as of October 31, 2005. Backlog refers to the aggregate revenues remaining to be earned at a specified date under contracts we hold.

- Product order backlog was approximately $18.1 million and $20.3 million as of October 31, 2006 and 2005, respectively, representing 8.05 MW as of October 31, 2006 and 8.25 MW as of October 31, 2005. Product orders represent approximately 50 percent of our total funded backlog as of October 31, 2006. Backlog for long-term service agreements was approximately $9.8 million and $6.1 million as of October 31, 2006 and 2005, respectively. Although backlog reflects business that is considered firm, cancellations or scope adjustments may occur and will be reflected in our backlog when known.

- 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 approximately $30.1 million and $15.8 million as of October 31, 2006 and 2005, respectively. The unfunded portion of our research and development contracts amounted to approximately $21.6 million and $3.9 million as of October 31, 2006 and 2005, 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, 2006 and 2005, we had contracts for power plants totaling 4 MW under power purchase agreements ranging from 5 - 10 years. Revenue under these agreements is recognized as electricity is produced. This revenue is not included in backlog.

EMPLOYEES

As of October 31, 2006 we had 384 full-time employees, of whom 110 were located at the Torrington, Connecticut manufacturing plant, and 274 were located at the Danbury, Connecticut facility or various field offices.

AVAILABLE INFORMATION

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports will be made available free of charge through the Investor Relations section of the Company’s Internet website (http://www.fuelcellenergy.com) as soon as practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission. Material contained on our website is not incorporated by reference in this report. Our executive offices are located at 3 Great Pasture Road, Danbury, CT 06813.

Item 1A. RISK FACTORS

You should carefully consider the following risk factors before making an investment decision. If any of the following risks actually occur, our business, financial condition, or results of operations could be materially and adversely affected. In such cases, the trading price of our common stock could decline, and you may lose all or part of your investment.

We have recently incurred losses and anticipate continued losses and negative cash flow.

We have been transitioning from a contract research and development company to a commercial products developer and manufacturer. As such, we have not been profitable since our fiscal year ended October 31, 1997. We expect to continue to incur net losses and generate negative cash flow until we can produce sufficient revenues to cover our costs. We may never become profitable. Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future. For the reasons discussed in more detail below, there are substantial uncertainties associated with our achieving and sustaining profitability.

Our cost reduction strategy may not succeed or may be significantly delayed, which may result in our inability to offer our products at competitive prices and may adversely affect our sales.

Our cost reduction strategy is based on the assumption that a significant increase in production will result in economies of scale. In addition, our cost reduction strategy relies on advancements in our manufacturing process, global competitive sourcing, engineering design and technology (including projected power output) that are currently not ascertainable. Failure to achieve our cost reduction targets would have a material adverse effect on our commercialization plans and, therefore, our business, prospects, results of operations and financial condition.

Our products will compete with products using other energy sources, and if the prices of the alternative sources are lower than energy sources used by our products, sales of our products will be adversely affected.

Our Direct FuelCell has been operated using a variety of hydrocarbon fuels, including natural gas, methanol, diesel, biogas, coal gas, coal mine methane and propane. If these fuels are not readily available or if their prices increase such that electricity produced by our products costs more than electricity provided by other generation sources, our products would be less economically attractive to potential customers. In addition, we have no control over the prices of several types of competitive energy sources such as oil, gas or coal. Significant decreases (or short term increases) in the price of these fuels could also have a material adverse effect on our business because other generation sources could be more economically attractive to consumers than our products.

We have signed long-term power purchase and service agreements with customers, which are subject to market conditions and operating risks that may affect our operating results.

Under the terms of our power purchase agreements, customers agree to purchase power from our fuel cell power plants at negotiated rates, generally for periods of five to ten years. Electricity rates are generally a function of the customer's current and future electricity pricing available from the grid. Revenues are earned and collected under these PPAs as power is produced. As owner of the power plants in these PPA entities, we are responsible for all operating costs necessary to maintain, monitor and repair the power plants. Under certain agreements, we are also responsible for procuring fuel, generally natural gas, to run the power plants. Should electricity rates decrease or operating costs increase from our original estimates, our results of operations could be negatively impacted. We have qualified for incentive funding for these projects in California under the states' Self Generation Incentive Funding Program and from other government programs. Funds are payable upon commercial installation and demonstration of the plant and may require return of the funds for failure of certain performance requirements. Revenue related to these incentive

funds is recognized ratably over the performance period. We are not required to produce minimum amounts of power under our PPA agreements and we have the right to terminate PPA agreements by giving written notice to the customer, subject to certain exit costs.

We have contracted with certain customers to provide service of fuel cell power plants over terms ranging from one to thirteen years. Under the provisions of these contracts, we provide services to maintain, monitor and repair customer power plants. Pricing for service contracts is based upon estimates of future costs, which given the early stage of development could be materially different from actual expenses.

We extend product warranties which could affect our operating results.

We warranty our products for a specific period of time against manufacturing or performance defects. As we have limited operating experience, warranty costs are expensed as incurred. As a result operating results could be negatively impacted should there be product manufacturing or performance defects.

We currently face and will continue to face significant competition.

Our Direct FuelCell currently faces, and will continue to face, significant competition. We compete on the basis of our products' reliability, fuel efficiency, environmental considerations and cost. Technological advances in alternative energy products or improvements in the electric grid or other sources of power generation, or other fuel cell technologies may negatively affect the development or sale of some or all of our products or make our products non-competitive or obsolete prior to commercialization or afterwards. Other companies, some of which have substantially greater resources than ours, are currently engaged in the development of products and technologies that are similar to, or may be competitive with, our products and technologies.

Several companies in the U.S. are involved in fuel cell development, although we believe we are the only domestic company engaged in significant manufacturing and commercialization of carbonate fuel cells. Emerging fuel cell technologies (and companies developing them) include proton exchange membrane fuel cells (Ballard Power Systems, Inc.; United Technologies Corp. or UTC Fuel Cells; and Plug Power), phosphoric acid fuel cells (UTC Fuel Cells) and solid oxide fuel cells (Siemens Westinghouse Electric Company, SOFCo, General Electric, Delphi, Rolls Royce and Acumentrics). Each of these competitors has the potential to capture market share in our target markets.

There are other potential carbonate fuel cell competitors internationally. In Europe, a company in Italy, Ansaldo Fuel Cells, is actively engaged in carbonate fuel cell development and is a potential competitor.

Other than fuel cell developers, we must also compete with such companies as Caterpillar, Cummins, and Detroit Diesel, which manufacture more mature combustion-based equipment, including various engines and turbines, and have well-established manufacturing, distribution, and operating and cost features. Significant competition may also come from gas turbine companies like General Electric, Ingersoll Rand, Solar Turbines and Kawasaki, which have recently made progress in improving fuel efficiency and reducing pollution in large-size combined cycle natural gas fueled generators. These companies have also made efforts to extend these advantages to smaller sizes.

We have large and influential stockholders, which may make it difficult for a third party to acquire our common stock.

Our largest two institutional shareholders each own more than 5%, but less than 10%, of our outstanding common stock. MTU Friedrichshafen GmbH owns approximately 5% of our outstanding common stock. James D. Gerson beneficially owns approximately 2% of our outstanding common stock. Loeb Investors Co. LXXV and Warren Bagatelle (a managing director of an affiliate of Loeb Investors Co. LXXV) collectively beneficially own approximately 2% of our outstanding common stock. These ownership levels could make it difficult for a third party to acquire our common stock or have input into the decisions made by our board of directors, which include Michael Bode (Chief Executive Officer of MTU CFC Solutions GmbH), James D. Gerson, Warren Bagatelle and Thomas L. Kempner (Chairman and Chief Executive Officer of an affiliate of Loeb Investors Co. LXXV). MTU CFC is also a

licensee of our technology and a purchaser of our Direct FuelCell products. Therefore, it may be in MTU CFC's interest to possess substantial influence over matters concerning our overall strategy and technological and commercial development.

MTU CFC may develop competing technologies.

MTU CFC is currently developing carbonate fuel cell technology. If this technology does not use DFC know-how, MTU CFC must use good faith efforts to license the technology to us. If MTU CFC is successful but does not grant us a license, it may be directly competing with us while having a significant ownership interest in us, and a seat on our board of directors. We have agreed with MTU CFC to continue developing products with as much commonality as possible. However, the license agreement between us and MTU CFC provides that each of us retains the right to independently pursue the development of carbonate fuel cell technologies.

We have limited experience manufacturing our Direct FuelCell products on a commercial basis, which may adversely affect our planned increases in production capacity and our ability to satisfy customer requirements.

We have limited experience manufacturing our Direct FuelCell products on a commercial basis. Our manufacturing, testing and conditioning facilities have equipment in place for a production capacity of 50 MW per year. We expect that we will then increase our manufacturing capacity based on market demand. We cannot be sure that we will be able to achieve any planned increases in production capacity. Also, as we scale up our production capacity, we cannot be sure that unplanned failures or other technical problems relating to the manufacturing process will not occur.

Even if we are successful in achieving our planned increases in production capacity, we cannot be sure that we will do so in time to meet our product commercialization schedule or to satisfy the requirements of our customers. Additionally, we cannot be sure that we will be able to develop efficient, low-cost manufacturing capabilities and processes (including automation) that will enable us to meet our cost goals and profitability projections. Our failure to develop advanced manufacturing capabilities and processes, or meet our cost goals, could have a material adverse effect on our business, prospects, results of operations and financial condition.

Unanticipated increases or decreases in business growth may result in adverse financial consequences for us.

If our business grows more quickly than we anticipate, our existing and planned manufacturing facilities may become inadequate and we may need to seek out new or additional space, at considerable cost to us. If our business does not grow as quickly as we expect, our existing and planned manufacturing facilities would, in part, represent excess capacity for which we may not recover the cost; in that circumstance, our revenues may be inadequate to support our committed costs and our planned growth and our gross margins and business strategy would be adversely affected.

Our plans are dependent on market acceptance of our Direct FuelCell products.

Our plans are dependent upon market acceptance of, as well as enhancements to, those products. Fuel cell systems represent an emerging market, and we cannot be sure that potential customers will accept fuel cells as a replacement for traditional power sources. As is typical in a rapidly evolving industry, demand and market acceptance for recently introduced products and services are subject to a high level of uncertainty and risk. Since the distributed generation market is still evolving, it is difficult to predict with certainty the size of the market and its growth rate. The development of a market for our Direct FuelCell products may be affected by many factors that are out of our control, including:

- the cost competitiveness of our fuel cell products;
- the future costs of natural gas and other fuels used by our fuel cell products;
- consumer reluctance to try a new product;
- perceptions of the safety of our fuel cell products;
- the market for distributed generation;
- local permitting and environmental requirements; and
- the emergence of newer, more competitive technologies and products.

If a sufficient market fails to develop or develops more slowly than we anticipate, we may be unable to recover the losses we will have incurred in the development of Direct FuelCell products and may never achieve profitability.

As we continue to commercialize our Direct FuelCell products, we will continue to develop warranties, production guarantees and other terms and conditions relating to our products that will be acceptable to the marketplace, and continue to develop a service organization that will aid in servicing our products and obtain self-regulatory certifications, if available, with respect to our products. Failure to achieve any of these objectives may also slow the development of a sufficient market for our products and, therefore, have a material adverse effect on our results of operations.

Our government research and development contracts are subject to the risk of termination by the contracting party and we may not realize the full amounts allocated under the contracts due to the lack of Congressional appropriations.

A portion of our fuel cell revenues have been derived from long-term cooperative agreements and other contracts with the U.S. Department of Energy ("DOE"), the U.S. Department of Defense, the U.S. Navy and other U.S. government agencies. These agreements are important to the continued development of our technology and our products.

Generally, our U.S. government research and development contracts, are subject to the risk of termination at the convenience of the contracting agency. Furthermore, these contracts, irrespective of the amounts allocated by the contracting agency, are subject to annual Congressional appropriations and the results of government or agency sponsored reviews and audits of our cost reduction projections and efforts. We can only receive funds under these contracts ultimately made available to us annually by Congress as a result of the appropriations process. Accordingly, we cannot be sure whether we will receive the full amounts awarded under our government research and development or other contracts. Failure to receive the full amounts under any of our government research and development

contracts could materially and adversely affect our business prospects, results of operations and financial condition.

A negative government audit could result in an adverse adjustment of our revenue and costs and could result in civil and criminal penalties

Government agencies, such as the Defense Contract Audit Agency, routinely audit and investigate government contractors. These agencies review a contractor's performance under its contracts, cost structure and compliance with applicable laws, regulations and standards. If the agencies determine through these audits or reviews that we improperly allocated costs to specific contracts, they will not reimburse us for these costs. Therefore, an audit could result in adjustments to our revenue and costs.

Further, although we have internal controls in place to oversee our government contracts, no assurance can be given that these controls are sufficient to prevent isolated violations of applicable laws, regulations and standards. If the agencies determine that we or one of our subcontractors engaged in improper conduct, we may be subject to civil or criminal penalties and administrative sanctions, payments, fines and suspension or prohibition from doing business with the government, any of which could materially affect our financial condition.

The U.S. government has certain rights relating to our intellectual property, including restricting or taking title to certain patents.

Many of our U.S. patents relating to our fuel cell technology are the result of government-funded research and development programs. Two of our patents that were the result of DOE-funded research prior to January 1988 (the date that we qualified as a "small business") are owned by the U.S. government and have been licensed to us. This license is revocable only in the limited circumstances where it has been demonstrated that we are not making an effort to commercialize the invention. We own all patents resulting from research funded by our DOE contracts awarded after January 1988 to date, based on our "small business" status when each contract was awarded. Under current regulations, patents resulting from research funded by government agencies other than the DOE are owned by us, whether or not we are a "small business."

Ten U.S. patents that we own have resulted from government-funded research and are subject to the risk of exercise of "march-in" rights by the government. March-in rights refer to the right of the U.S. government or a government agency to exercise its non-exclusive, royalty-free, irrevocable worldwide license to any technology developed under contracts funded by the government if the contractor fails to continue to develop the technology. These "march-in" rights permit the U.S. government to take title to these patents and license the patented technology to third parties if the contractor fails to utilize the patents. In addition, our DOE-funded research and development agreements also require us to agree that we will not provide to a foreign entity any fuel cell technology subject to that agreement unless the fuel cell technology will be substantially manufactured in the U.S. Accordingly, we could lose some or all of the value of these patents.

A failure to qualify as a "small business" could adversely affect our rights to own future patents under DOE-funded contracts.

Qualifying as a "small business" under DOE contracts allows us to own the patents that we develop under DOE contracts. A "small business" under applicable government regulations generally consists of no more than 500 employees. If we continue to grow, we will no longer qualify as a "small business" and no longer own future patents we develop under future contracts, grants or cooperative agreements funded by the DOE based on such certification, unless we obtain a patent waiver from the DOE. Should we not obtain a patent waiver and outright ownership, we would nevertheless retain exclusive rights to any such patents, so long as we continue to commercialize the technology covered by the patents. As a result of our acquisition of Global, the number of our employees increased and therefore, we temporarily did not qualify as a "small business." Following the sale of Global and its TEG product line on May 27, 2004, we again qualified as a "small business"; however, we cannot assure you that we will continue to

qualify as a “small business” in the future.

Our future success and growth is dependent on our distribution strategy.

We cannot assure you that we will enter into distributor relationships that are consistent with, or sufficient to support, our commercialization plans or our growth strategy or that these relationships will be on terms favorable to us. Even if we enter into these types of relationships, we cannot assure you that the distributors with which we form relationships will focus adequate resources on selling our products or will be successful in selling them. Some of these distributor arrangements have or will require that we grant exclusive distribution rights to companies in defined territories. These exclusive arrangements could result in us being unable to enter into other arrangements at a time when the distributor with which we form a relationship is not successful in selling our products or has reduced its commitment to marketing our products. In addition, certain distributor arrangements include, and some future distributor arrangements may also include, the issuance of equity and warrants to purchase our equity, which may have an adverse effect on our stock price. To the extent we enter into distributor relationships, the failure of these distributors in assisting us with the marketing and distribution of our products may adversely affect our results of operations and financial condition.

We cannot be sure that MTU CFC will continue to, or original equipment manufacturers ("OEMs") will, manufacture or package products using our Direct FuelCell components. In this area, our success will largely depend upon our ability to make our products compatible with the power plant products of OEMs and the ability of these OEMs to sell their products containing our products. In addition, some OEMs may need to redesign or modify their existing power plant products to fully incorporate our products. Accordingly, any integration, design, manufacturing or marketing problems encountered by MTU CFC or other OEMs could adversely affect the market for our Direct FuelCell products and, therefore, our business, prospects, results of operations and financial condition.

We depend on third party suppliers for the development and supply of key components for Direct FuelCell products.

We purchase several key components of our Direct FuelCell products from other companies and rely on third-party suppliers for the balance-of-plant components in our Direct FuelCell products. There are a limited number of suppliers for some of the key components of Direct FuelCell products. A supplier's failure to develop and supply components in a timely manner or to supply components that meet our quality, quantity or cost requirements or technical specifications or our inability to obtain alternative sources of these components on a timely basis or on terms acceptable to us could harm our ability to manufacture our Direct FuelCell products. In addition, to the extent the processes that our suppliers use to manufacture components are proprietary, we may be unable to obtain comparable components from alternative suppliers.

We do not know when or whether we will secure long-term supply relationships with any of our suppliers or whether such relationships will be on terms that will allow us to achieve our objectives. Our business, prospects, results of operations and financial condition could be harmed if we fail to secure long-term relationships with entities that will supply the required components for our Direct FuelCell products.

We depend on our intellectual property, and our failure to protect that intellectual property could adversely affect our future growth and success.

Failure to protect our existing intellectual property rights may result in the loss of our exclusivity or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation or be enjoined from using such intellectual property. We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. The patents that we have obtained will expire between 2008 and 2024 and the average remaining life of our U.S. patents is approximately 11.4 years.

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Some of our intellectual property is not covered by any patent or patent application and includes trade secrets and other know-how that is not patentable, particularly as it relates to our manufacturing processes and engineering design. In addition, some of our intellectual property includes technologies and processes that may be similar to the patented technologies and processes of third parties. If we are found to be infringing third-party patents, we do not know whether we will able to obtain licenses to use such patents on acceptable terms, if at all. Our patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, we cannot assure you that:

- any of the U.S., Canadian or other foreign patents owned by us or other patents that third parties license to us will not be invalidated, circumvented, challenged, rendered unenforceable or licensed to others; or

- any of our pending or future patent applications will be issued with the breadth of claim coverage sought by us, if issued at all.

In addition, effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in certain foreign countries.

We also seek to protect our proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements and, if applicable, inventors' rights agreements with our subcontractors, vendors, suppliers, consultants, strategic partners and employees. We cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that such persons or institutions will not assert rights to intellectual property arising out of these relationships. Certain of our intellectual property has been licensed to us on a non-exclusive basis from third parties that may also license such intellectual property to others, including our competitors. If our licensors are found to be infringing third-party patents, we do not know whether we will be able to obtain licenses to use the intellectual property licensed to us on acceptable terms, if at all.

If necessary or desirable, we may seek extensions of existing licenses or further licenses under the patents or other intellectual property rights of others. However, we can give no assurances that we will obtain such extensions or further licenses or that the terms of any offered licenses will be acceptable to us. The failure to obtain a license from a third party for intellectual property that we use at present could cause us to incur substantial liabilities, and to suspend the manufacture or shipment of products or our use of processes requiring the use of that intellectual property.

While we are not currently engaged in any material intellectual property litigation, we could become subject to lawsuits in which it is alleged that we have infringed the intellectual property rights of others or commence lawsuits against others who we believe are infringing upon our rights. Our involvement in intellectual property litigation could result in significant expense to us, adversely affecting the development of sales of the challenged product or intellectual property and diverting the efforts of our technical and management personnel, whether or not that litigation is resolved in our favor.

Our future success will depend on our ability to attract and retain qualified management and technical personnel.

Our future success is substantially dependent on the continued services and on the performance of our executive officers and other key management, engineering, scientific, manufacturing and operating personnel, particularly R. Daniel Brdar, our Chief Executive Officer. The loss of the services of any executive officer, including Mr. Brdar, or other key management, engineering, scientific, manufacturing and operating personnel, could materially adversely affect our business. Our ability to achieve our development and commercialization plans will also depend on our ability to attract and retain additional qualified management and technical personnel. Recruiting personnel for the fuel cell industry is competitive. We do not know whether we will be able to attract or retain additional qualified

management and technical personnel. Our inability to attract and retain additional qualified management and technical personnel, or the departure of key employees, could materially and adversely affect our development and commercialization plans and, therefore, our business, prospects, results of operations and financial condition.

Our management may be unable to manage rapid growth effectively.

We may rapidly expand our manufacturing capabilities, accelerate the commercialization of our products and enter a period of rapid growth, which will place a significant strain on our senior management team and our financial and other resources. Any expansion may expose us to increased competition, greater overhead, marketing and support costs and other risks associated with the commercialization of a new product. Our ability to manage rapid growth effectively will require us to continue to improve our operations, to improve our financial and management information systems and to train, motivate and manage our employees. Difficulties in effectively managing the budgeting, forecasting and other process control issues presented by such a rapid expansion could harm our business, prospects, results of operations and financial condition.

We may be affected by environmental and other governmental regulation.

We are subject to federal, state, provincial or local regulation with respect to, among other things, emissions and siting. Assuming no co-generation applications are used in conjunction with our Direct FuelCell plants, they will discharge humid flue gas at temperatures of up to 800º F, water at temperatures of approximately 10-20 º F above surrounding air temperatures and carbon dioxide.

In addition, it is possible that industry-specific laws and regulations will be adopted covering matters such as transmission scheduling, distribution and the characteristics and quality of our products, including installation and servicing. These regulations could limit the growth in the use of carbonate fuel cell products, decrease the acceptance of fuel cells as a commercial product and increase our costs and, therefore, the price of our Direct FuelCell products. Accordingly, compliance with existing or future laws and regulations could have a material adverse effect on our business, prospects, results of operations and financial condition.

Utility companies could impose customer fees or interconnection requirements on our customers that could make our products less desirable.

Utility companies commonly charge fees to larger, industrial customers for disconnecting from the electric grid or for having the capacity to use power from the electric grid for back up purposes. These fees could increase the cost to our customers of using our Direct FuelCell products and could make our products less desirable, thereby harming our business, prospects, results of operations and financial condition.

Several states have created and adopted or are in the process of creating their own interconnection regulations covering both technical and financial requirements for interconnection to utility grids. Depending on the complexities of the requirements, installation of our systems may become burdened with additional costs that might have a negative impact on our ability to sell systems. The Institute of Electrical and Electronics Engineers has been working to create an interconnection standard addressing the technical requirements for distributed generation to interconnect to utility grids. Many parties are hopeful that this standard will be adopted nationally to help reduce the barriers to deployment of distributed generation such as fuel cells; however this standard may not be adopted nationally thereby limiting the commercial prospects and profitability of our fuel cell systems.

We could be liable for environmental damages resulting from our research, development or manufacturing operations.

Our business exposes us to the risk of harmful substances escaping into the environment, resulting in personal injury or loss of life, damage to or destruction of property, and natural resource damage. Depending on the nature of the claim, our current insurance policies may not adequately reimburse us for costs incurred in settling environmental damage claims, and in some instances, we may not be reimbursed at all. Our business is subject to numerous federal, state and local laws and regulations that govern environmental protection and human health and safety. We believe that our businesses are operating in compliance in all material respects with applicable environmental laws, however these laws and regulations have changed frequently in the past and it is reasonable to expect additional and more stringent changes in the future.

Our operations may not comply with future laws and regulations and we may be required to make significant unanticipated capital and operating expenditures. If we fail to comply with applicable environmental laws and regulations, governmental authorities may seek to impose fines and penalties on us or to revoke or deny the issuance or renewal of operating permits and private parties may seek damages from us. Under those circumstances, we might be required to curtail or cease operations, conduct site remediation or other corrective action, or pay substantial damage claims.

We may be required to conduct environmental remediation activities, which could be expensive.

We are subject to a number of environmental laws and regulations, including those concerning the handling, treatment, storage and disposal of hazardous materials. These environmental laws generally impose liability on present and former owners and operators, transporters and generators for remediation of contaminated properties. We believe that our businesses are operating in compliance in all material respects with applicable environmental laws, many of which provide for substantial penalties for violations. We cannot assure you that future changes in such laws, interpretations of existing regulations or the discovery of currently unknown problems or conditions will not require substantial additional expenditures. Any noncompliance with these laws and regulations could subject us to material administrative, civil or criminal penalties or other liabilities. In addition, we may be required to incur substantial costs to comply with current or future environmental and safety laws and regulations.

Our products use inherently dangerous, flammable fuels, operate at high temperatures and use corrosive carbonate material, each of which could subject our business to product liability claims.

Our business exposes us to potential product liability claims that are inherent in products that use hydrogen. Our products utilize fuels such as natural gas and convert these fuels internally to hydrogen that is used by our products to generate electricity. The fuels we use are combustible and may be toxic. In addition, our Direct FuelCell products operate at high temperatures and our Direct FuelCell products use corrosive carbonate material, which could expose us to potential liability claims. Although we have comprehensive safety, maintenance and training programs in place, we cannot guarantee there will not be accidents. Any accidents involving our products or other hydrogen-using products could materially impede widespread market acceptance and demand for our Direct FuelCell products. In addition, we might be held responsible for damages beyond the scope of our insurance coverage. We also cannot predict whether we will be able to maintain our insurance coverage on acceptable terms.

We are subject to risks inherent in international operations.

Since we market our Direct FuelCell products both inside and outside the U.S. and Canada, our success depends, in part, on our ability to secure international customers and our ability to manufacture products that meet foreign regulatory and commercial requirements in target markets. We have limited experience developing and manufacturing our products to comply with the commercial and legal requirements of international markets. In addition, we are subject to tariff regulations and requirements for export licenses, particularly with respect to the export of some of our technologies. We face numerous challenges in our international expansion, including unexpected changes in regulatory requirements, fluctuations in currency exchange rates, longer accounts receivable requirements and collections, difficulties in managing international operations, potentially adverse tax consequences, restrictions on repatriation of earnings and the burdens of complying with a wide variety of international laws. Any of these factors could adversely affect our operations and revenues.

Our stock price has been and could remain volatile.

The market price for our common stock has been and may continue to be volatile and subject to extreme price and volume fluctuations in response to market and other factors, including the following, some of which are beyond our control:

- failure to meet our product development and commercialization milestones;
- variations in our quarterly operating results from the expectations of securities analysts or investors;
- downward revisions in securities analysts' estimates or changes in general market conditions;
- announcements of technological innovations or new products or services by us or our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- additions or departures of key personnel;
- investor perception of our industry or our prospects;
- insider selling or buying;
- demand for our common stock; and
- general technological or economic trends.

In the past, following periods of volatility in the market price of their stock, many companies have been the subjects of securities class action litigation. If we became involved in securities class action litigation in the future, it could result in substantial costs and diversion of management's attention and resources and could harm our stock price, business, prospects, results of operations and financial condition.

Provisions of Delaware and Connecticut law and of our charter and by-laws may make a takeover more difficult.

Provisions in our certificate of incorporation and by-laws and in Delaware and Connecticut corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt that is opposed

by our management and board of directors. Public stockholders who might desire to participate in such a transaction may not have an opportunity to do so. These anti-takeover provisions could substantially impede the ability of public stockholders to benefit from a change in control or change in our management and board of directors.

We depend on relationships with strategic partners, and the terms and enforceability of many of these relationships are not certain.

We have entered into relationships with strategic partners for design, product development and distribution of our existing products, and products under development, some of which may not have been documented by a definitive agreement. The terms and conditions of many of these agreements allow for termination by the partners. Termination of any of these agreements could adversely affect our ability to design, develop and distribute these products to the marketplace. We cannot assure you that we will be able to successfully negotiate and execute definitive agreements with any of these partners, and failure to do so may effectively terminate the relevant relationship.

Future sales of substantial amounts of our common stock could affect the market price of our common stock.

Future sales of substantial amounts of our common stock, or securities convertible or exchangeable into shares of our common stock, into the public market, including shares of our common stock issued upon exercise of options and warrants, or perceptions that those sales could occur, could adversely affect the prevailing market price of our common stock and our ability to raise capital in the future.

The rights of the Series 1 preferred shares and Series B preferred shares could negatively impact our company.

The terms of the Series 1 preferred shares issued by FuelCell Energy, Ltd., our wholly-owned, indirect subsidiary, provide rights to the holder, Enbridge Inc. (“Enbridge”), including dividend and conversion rights among others that could negatively impact us. For example, the terms of the Series 1 preferred shares provide that the holders are entitled to receive cumulative dividends for each calendar quarter for so long as such shares are outstanding. Assuming the exchange rate for Canadian dollars is Cdn.$1.1758 to U.S.$1.00 (exchange rate on January 10, 2007) at the time of the applicable dividend payment date, we are required to pay a preferred dividend of approximately $265,776 per calendar quarter, subject to reduction in accordance with the terms of the Series 1 preferred shares. The terms of the Series 1 preferred shares also require that the holder be paid any accrued and unpaid dividends on December 31, 2010. To the extent that there is a significant amount of accrued dividends that is unpaid as of December 31, 2010 and we do not have sufficient working capital at that time to pay the accrued dividends, our financial condition could be adversely affected. We have guaranteed these dividend obligations, including paying a minimum of Cdn.$500,000 in cash annually to Enbridge for so long as Enbridge holds the Series 1 preferred shares. We have also guaranteed the liquidation obligations of FuelCell Energy, Ltd. under the Series 1 preferred shares.

We are also required to issue common stock to the holder of the Series 1 preferred shares if and when the holder exercises its conversion rights. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders. For example, assuming the holder of the Series 1 preferred shares exercises its conversion rights after July 31, 2020 and assuming our common stock price is U.S.$6.22 (our common stock closing price on January 10, 2007) and the exchange rate for Canadian dollars is Cdn.$1.1758 to U.S.$1.00 (exchange rate on January 10, 2007) at the time of conversion, we would be required to issue approximately 3,598,260 shares of our common stock.

The terms of the Series B Preferred Shares also provide rights to their holders that could negatively impact us. Holders of the Series B Preferred Shares are entitled to receive cumulative dividends at the rate of $50 per share per year, payable either in cash or in shares of our common stock. To the extent the dividend is paid in shares, additional issuances could be dilutive to our existing stockholders and the sale of those shares could have a negative impact on the price of our common stock. A share of our Series B preferred stock may be converted at any time, at the option of the holder, into 85.1064 shares of our common stock (which is equivalent to an initial conversion price of $11.75 per share) plus cash in lieu of fractional shares. Furthermore, the conversion rate applicable to the Series B Preferred Stock is subject to adjustment upon the occurrence of certain events.

Item 2. PROPERTIES

Our headquarters are located in Danbury, Connecticut. The following is a summary of our offices and locations:

Location	Business Use	Square Footage	Lease Expiration Dates
Danbury, Connecticut	Corporation Headquarters, Research and Development, Sales, Marketing, Purchasing and Administration	72,000	Company owned
Torrington, Connecticut	Manufacturing	65,000	December 2010 (1)
Danbury, Connecticut	Manufacturing and Operations	38,000	October 2009

(1) We have an option to extend the lease for an additional five years.

Item 3. LEGAL PROCEEDINGS

On November 14, 2005, Zoot Properties, LLC and Zoot Enterprises, Inc. (“Zoot”) commenced an action in the U.S. District Court for the District of Montana, Butte Division against the Company and one of its distribution partners, PPL Energy Services Holding, LLC. The lawsuit alleges that the plaintiffs purchased fuel cells from PPL that were manufactured by the Company, and that these fuel cells have failed to perform as represented and warranted. Zoot is seeking rescission of the contract with PPL, totaling approximately $2.5 million. Zoot may also be seeking damages for breach of contract and under tort arising out of the alleged misrepresentation. The Company intends to vigorously defend the action. The Company is unable to predict at this time the ultimate outcome of this lawsuit and therefore no loss contingency has been included in the consolidated financial statements.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

FUELCELL COMMON STOCK

Our common stock has been publicly traded since June 25, 1992. From September 21, 1994 through February 25, 1997, it was quoted on the NASDAQ National Market, and from February 26, 1997 through June 6, 2000 it was traded on the American Stock Exchange.

Our common stock has traded under the symbol "FCEL" on the Nasdaq Stock Market since June 7, 2000. The following table sets forth the high and low sale prices for our common stock for the fiscal periods indicated as reported by the Nasdaq Stock Market during the indicated quarters.

	Common Stock Price	
	High	Low
Year Ended October 31, 2004		
First Quarter	$ 17.79	$ 10.75
Second Quarter	$ 20.30	$ 11.54
Third Quarter	$ 17.59	$ 8.30
Fourth Quarter	$ 13.36	$ 7.16
Year Ended October 31, 2005		
First Quarter	$ 13.45	$ 7.98
Second Quarter	$ 12.06	$ 7.71
Third Quarter	$ 10.94	$ 7.05
Fourth Quarter	$ 12.25	$ 8.25
Year Ended October 31, 2006		
First Quarter	$ 10.90	$ 7.90
Second Quarter	$ 15.00	$ 9.22
Third Quarter	$ 13.97	$ 8.29
Fourth Quarter	$ 9.90	$ 6.59

On January 10, 2007, the closing price of our common stock on the Nasdaq Stock Market was $6.22 per share. As of January 10, 2007, there were 736 holders of record of our common stock.

We have never paid a cash dividend on our common stock and do not anticipate paying any cash dividends on common stock in the foreseeable future. In addition, the terms of our Series B preferred shares prohibit the payment of dividends on our common stock unless all dividends on the Series B preferred stock have been paid in full.

SERIES 1 PREFERRED SHARES

On August 4, 2003, we entered into a combination agreement with Global Thermoelectric Inc. ("Global") to combine Global with us in a share-for-share exchange pursuant to a Plan of Arrangement subject to approval by the Court of Queen's Bench of Alberta, Canada. On October 31, 2003, our shareholders and the shareholders of Global approved the combination. On October 31, 2003, the Court of Queen's Bench of Alberta issued an order approving the

combination. On November 3, 2003, the combination transaction was consummated. In the aggregate, we issued approximately 8.2 million shares of our common stock and exchangeable shares in the acquisition. Following our acquisition of Global, Global's Series 2 preferred shares remained outstanding in Global. At the time of the sale of our thermoelectric generator business, the holder of the Series 2 preferred shares exchanged them for Series 1 Class A cumulative redeemable exchangeable preferred shares (which were referred to as the Series 1 preferred shares) issued by FuelCell Energy, Ltd., one of our indirect, wholly-owned subsidiaries. We have guaranteed the obligations of FuelCell Energy, Ltd. under the Series 1 preferred shares.

The Series 1 preferred shares may be converted into shares of our common stock at the following conversion prices:

- Cdn.$120.22 per share of our common stock until July 31, 2010;
- Cdn.$129.46 per share of our common stock after July 31, 2010 until July 31, 2015;
- Cdn.$138.71 per share of our common stock after July 31, 2015 until July 31, 2020; and
- at any time after July 31, 2020, the price equal to 95% of the then current market price (converted to Cdn.$ at the time of such calculation) of shares of our common stock at the time of conversion.

The foregoing conversion prices are subject to adjustment for certain subsequent events. As illustrated below, the number of shares of our common stock issuable upon conversion of the Series 1 preferred shares after July 31, 2020 may be significantly greater than the number of shares issuable prior to that time.

The following examples illustrate the number of shares of our common stock that we will be required to issue to the holder(s) of the Series 1 preferred shares if and when the holder(s) exercise their conversion rights pursuant to the terms of the Series 1 preferred shares. The following examples are based upon Cdn.$25.0 million of Series 1 preferred shares outstanding (which is the amount currently outstanding) and assume that all accrued dividends on the Series 1 preferred shares have been paid through the time of the conversion and, in the case of conversions occurring after July 31, 2020, that the exchange rate for Canadian dollars is Cdn.$1.1758 to U.S.$1.00 (exchange rate on January 10, 2007) at the time of the conversion:

- if the Series 1 preferred shares convert prior to July 31, 2010, we would be required to issue approximately 207,952 shares of our common stock;
- if the Series 1 preferred shares convert after July 31, 2010, but prior to July 31, 2015, we would be required to issue approximately 193,110 shares of our common stock;
- if the Series 1 preferred shares convert after July 31, 2015, but prior to July 31, 2020, we would be required to issue approximately 180,232 shares of our common stock; and
- if the Series 1 preferred shares convert any time after July 31, 2020, assuming our common stock price is U.S. $6.22 (our common stock closing price on January 10, 2007) at the time of conversion, we would be required to issue approximately 3,598,260 shares of our common stock.

Subject to the Business Corporations Act (Alberta), the holder of the Series 1 preferred shares is not entitled to receive notice of or to attend or vote at any meeting of the FuelCell Energy, Ltd. Common shareholders. At present, we own all of the FuelCell Energy, Ltd. common stock.

Quarterly dividends of Cdn.$312,500 accrue on the Series 1 preferred shares (subject to possible reduction pursuant to the terms of the Series 1 preferred shares on account of increases in the price of our common stock). We have agreed to pay a minimum of Cdn.$500,000 in cash or common stock annually to Enbridge, the sole current holder of the Series 1 preferred shares, as long as Enbridge holds the shares. Interest accrues on cumulative unpaid dividends at a 2.45% quarterly rate, compounded quarterly, until payment thereof. All cumulative unpaid dividends must be paid by December 31, 2010. Subsequent to 2010, FuelCell Energy, Ltd. would be required to pay annual dividend amounts totaling Cdn.$1.25 million so long as the Series 1 Preferred shares remain outstanding. Cumulative unpaid dividends of $5.3 million on the Series 1 preferred shares were outstanding as of October 31, 2006. We have guaranteed the dividend obligations of FuelCell Energy, Ltd. to the Series 1 preferred shareholders.

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Subject to the Business Corporations Act (Alberta), we may redeem the Series 1 preferred shares, in whole or part, at any time, if on the day that the notice of redemption is first given, the volume-weighted average price at which our common stock is traded on the applicable stock exchange during the 20 consecutive trading days ending on a date not earlier than the fifth preceding day on which the notice of redemption is given was not less than a 20% premium to the current conversion price on payment of Cdn.$25.00 per Series 1 Preferred Share to be redeemed, together with an amount equal to all accrued and unpaid dividends to the date fixed for redemption. On or after July 31, 2010, the Series 1 preferred shares are redeemable by us at any time on payment of Cdn.$25.00 per Series 1 preferred share to be redeemed together with an amount equal to all accrued and unpaid dividends to the date fixed for redemption. Holders of the Series 1 preferred shares do not have any mandatory or conditional redemption rights. There are currently 1,000,000 Series 1 preferred shares outstanding.

In the event of the liquidation, dissolution or winding up of FuelCell Energy, Ltd., whether voluntary or involuntary, or any other distribution of its assets among its shareholders for the purpose of winding up its affairs, the holder of the Series 1 preferred shares will be entitled to receive the amount paid on such Series 1 preferred shares (currently Cdn.$25.0 million) together with an amount equal to all accrued and unpaid dividends thereon, before any amount will be paid or any of FuelCell Energy, Ltd.’s property or assets will be distributed to the holders of FuelCell Energy, Ltd.’s common stock. After payment to the holder of the Series 1 preferred shares of the amounts payable to them, the holder of the Series 1 preferred shares will not be entitled to share in any other distribution of FuelCell Energy, Ltd.’s property or assets. We have guaranteed the liquidation obligations of FuelCell Energy, Ltd. under the Series 1 preferred shares.

SERIES B PREFERRED SHARES

On November 11, 2004, we entered into a purchase agreement with Citigroup Global Markets Inc., RBC Capital Markets Corporation, Adams Harkness, Inc., and Lazard Freres & Co., LLC (the “Initial Purchasers”) for the private placement under Rule 144A of up to 135,000 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference $1,000) (“Series B Preferred Stock”). On November 17, 2004 and January 25, 2005, we closed on the sale of 100,000 shares and 5,875 shares, respectively, of Series B Preferred Stock to the Initial Purchasers.

At October 31, 2006 and 2005, there were 200,000 authorized of which 64,120 and 105,875 shares were issued and outstanding, respectively. The carrying value of the Series B Preferred Stock as of October 31, 2006 and 2005 represents the net proceeds to us of approximately $60.0 million and $99.0 million, respectively. During fiscal 2006, we converted 41,755 shares of Series B Preferred Stock (the "Shares") into 3,553,615 shares of our common stock. The conversion occurred pursuant to the terms of the Certificate of Designation for the Series B Preferred Stock, whereby upon conversion, the holders received 85.1064 shares of our common stock per share of Series B Preferred Stock. In addition, pursuant to this conversion, we paid a conversion premium of $4.3 million.

The following is a summary of certain provisions of our Series B Preferred Stock. The resale of the shares of our Series B Preferred Stock and the resale of the shares of our common stock issuable upon conversion of the shares of our Series B Preferred Stock are covered by a registration rights agreement.

Ranking

Shares of our Series B Preferred Stock rank with respect to dividend rights and rights upon our liquidation, winding up or dissolution:

- senior to shares of our common stock;
- junior to our debt obligations; and
- effectively junior to our subsidiaries' (i) existing and future liabilities and (ii) capital stock held by others.

Dividends

The Series B Preferred Stock pays cumulative annual dividends of $50 per share which are payable quarterly in arrears on February 15, May 15, August 15 and November 15, which commenced on February 15, 2005, when, as and if declared by the board of directors. Dividends will be paid on the basis of a 360-day year consisting of twelve 30-day months. Dividends on the shares of our Series B Preferred Stock will accumulate and be cumulative from the date of original issuance. Accumulated dividends on the shares of our Series B preferred stock will not bear any interest.

The dividend rate on the Series B Preferred Stock is subject to upward adjustment as set forth in the certificate of designation of the Series B Preferred Stock if we fail to pay, or to set apart funds to pay, dividends on the shares of our Series B Preferred Stock for any quarterly dividend period. The dividend rate on the Series B Preferred Stock is also subject to upward adjustment as set forth in the registration rights agreement entered into with the Initial Purchasers if we fail to satisfy our registration obligations with respect to the Series B Preferred Shares (or the underlying common shares) set forth in the registration rights agreement.

No dividends or other distributions may be paid or set apart for payment upon our common shares (other than a dividend payable solely in shares of a like or junior ranking) unless all accumulated and unpaid dividends have been paid or funds or shares of common stock therefore have been set apart on our Series B Preferred Stock.

We may pay dividends on the Series B Preferred Stock:

- in cash; or
- at the option of the holder, in shares of our common stock, which will be registered pursuant to a registration statement to allow for the immediate sale of these common shares in the public market.

Liquidation

The Series B Preferred Stock has a liquidation preference of $1,000 per share. Upon any voluntary or involuntary liquidation, dissolution or winding up of our company resulting in a distribution of assets to the holders of any class or series of our capital stock, each holder of shares of our Series B preferred stock will be entitled to payment out of our assets available for distribution of an amount equal to the liquidation preference per share of Series B Preferred Stock held by that holder, plus all accumulated and unpaid dividends on those shares to the date of that liquidation, dissolution, or winding up, before any distribution is made on any junior shares, including shares of our common stock, but after any distributions on any of our indebtedness or senior shares (if any). After payment in full of the liquidation preference and all accumulated and unpaid dividends to which holders of shares of our Series B preferred stock are entitled, holders of shares of our Series B preferred stock will not be entitled to any further participation in any distribution of our assets.

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Conversion

A share of our Series B Preferred Stock may be converted at any time, at the option of the holder, into 85.1064 shares of our common stock (which is equivalent to an initial conversion price of $11.75 per share) plus cash in lieu of fractional shares. The conversion rate is subject to adjustment upon the occurrence of certain events, as described below, but will not be adjusted for accumulated and unpaid dividends. Upon conversion, holders of Series B preferred stock will not receive a cash payment for any accumulated dividends. Instead accumulated dividends, if any, will be cancelled.

On or after November 20, 2009 we may, at our option, cause shares of our Series B Preferred Stock to be automatically converted into that number of shares of our common stock that are issuable at the then prevailing conversion rate. We may exercise our conversion right only if the closing price of our common stock exceeds 150% of the then prevailing conversion price for 20 trading days during any consecutive 30 trading day period, as described in the certificate of designation for the Series B preferred stock.

If holders of shares of our Series B Preferred Stock elect to convert their shares in connection with certain fundamental changes (as described below and in the certificate of designation), we will in certain circumstances discussed below increase the conversion rate by a number of additional shares of common stock upon conversion or, in lieu thereof, we may in certain circumstances elect to adjust the conversion rate and related conversion obligation so that shares of our Series B preferred stock are converted into shares of the acquiring or surviving company, in each case as described in the certificate of designation.

The adjustment of the conversion price of the Series B Preferred Stock is to prevent dilution of the interests of the holders of the Series B Preferred Shares, including on account of the following:

- Issuances of common stock as a dividend or distribution to holders of our common stock;

- Common stock share splits or share combinations;

- Issuances to holders of our common stock of any rights, warrants or options to purchase our common stock for a period of less than 60 days; and

- Distributions of assets, evidences of indebtedness or other property to holders of our common stock.

Shares of our Series B Preferred Stock will not be redeemable by us, except in the case of a fundamental change (as described below and in the certificate of designation) whereby holders may require us to purchase all or part of their shares at a redemption price equal to 100% of the liquidation preference of the shares of Series B Preferred Stock to be repurchased, plus accrued and unpaid dividends, if any. We may, at our option, elect to pay the redemption price in cash or, in shares of our common stock valued at a discount of 5% from the market price of shares of our common stock, or any combination thereof. Notwithstanding the foregoing, we may only pay such redemption price in shares of our common stock that are registered under the Securities Act of 1933 and eligible for immediate sale in the public market by non-affiliates of the Company.

Redemption by holders of the Series B Preferred Stock can only occur upon a fundamental change, which the Company does not consider to be probable at this time. Accordingly, future adjustments of the redemption price will only be made if and when a fundamental change is considered probable.

A “fundamental change” will be deemed to have occurred if any of the following occurs:

(1) any "person" or "group" is or becomes the beneficial owner, directly or indirectly, of 50% or more of the total voting power of all classes of our capital stock then outstanding and normally entitled to vote in the election of directors;

(2) during any period of two consecutive years, individuals who at the beginning of such period constituted the Board of Directors (together with any new directors whose election by our Board of Directors or whose nomination for election by our shareholders was approved by a vote of two-thirds of our directors then still in office who were either directors at the beginning of such period or whose election of nomination for election was previously so approved) cease for any reason to constitute a majority of our directors then in office;

(3) the termination of trading of our common stock on the Nasdaq Stock Market and such shares are not approved for trading or quoted on any other U.S. securities exchange; or

(4) we consolidate with or merge with or into another person or another person merges with or into us or the sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of our assets and certain of our subsidiaries, taken as a whole, to another person and, in the case of any such merger or consolidation, our securities that are outstanding immediately prior to such transaction and which represent 100% of the aggregate voting power of our voting stock are changed into or exchanged for cash, securities or property, unless pursuant to the transaction such securities are changed into securities of the surviving person that represent, immediately after such transaction, at least a majority of the aggregate voting power of the voting stock of the surviving person.

Notwithstanding the foregoing, holders of shares of Series B Preferred Stock will not have the right to require us to repurchase their shares if either:

- the last reported sale price of shares of our common stock for any five trading days within the 10 consecutive trading days ending immediately before the later of the fundamental change or its announcement equaled or exceeded 105% of the conversion price of the shares of Series B Preferred Stock immediately before the fundamental change or announcement;

- at least 90% of the consideration, excluding cash payments for fractional shares and in respect of dissenters' appraisal rights, in the transaction constituting the fundamental change consists of shares of capital stock traded on a U.S. national securities exchange or which will be so traded or quoted when issued or exchanged in connection with a fundamental change and as a result of the transaction, shares of Series B Preferred Stock become convertible into such publicly traded securities; or

- in the case of number 4 above of a fundamental change event, the transaction is effected solely to change our jurisdiction of incorporation.

Voting

Holders of shares of our Series B Preferred Stock have no voting rights unless (1) dividends on any shares of our Series B Preferred Stock or any other class or series of stock ranking on a parity with the shares of our Series B Preferred Stock with respect to the payment of dividends shall be in arrears for dividend periods, whether or not consecutive, containing in the aggregate a number of days equivalent to six calendar quarters or (2) we fail to pay the repurchase price, plus accrued and unpaid dividends, if any, on the fundamental change repurchase date for shares of our Series B Preferred Stock following a fundamental change (as described in the certificate of designation for the Series B Preferred Stock). In each such case, the holders of shares of our Series B Preferred Stock (voting separately

as a class with all other series of other Preferred Stock on parity with our Series B Preferred Stock upon which like voting rights have been conferred and are exercisable, if any) will be entitled to vote for the election of two directors in addition to those directors on the board of directors at such time at the next annual meeting of shareholders and each subsequent meeting until the repurchase price or all dividends accumulated on the shares of our Series B Preferred Stock have been fully paid or set aside for payment. The term of office of all directors elected by the holders of shares of our Series B Preferred Stock will terminate immediately upon the termination of the right of holders of shares of our Series B Preferred Stock to vote for directors.

So long as any shares of our Series B Preferred Stock remain outstanding, we will not, without the consent of the holders of at least two-thirds of the shares of our Series B Preferred Stock outstanding at the time (voting separately as a class with all other series of Preferred Stock, if any, on parity with our Series B Preferred Stock upon which like voting rights have been conferred and are exercisable) issue or increase the authorized amount of any class or series of shares ranking senior to the outstanding shares of our Series B Preferred Stock as to dividends or upon liquidation. In addition, we will not, subject to certain conditions, amend, alter or repeal provisions of our certificate of incorporation, including the certificate of designation relating to our Series B Preferred Stock, whether by merger, consolidation or otherwise, so as to adversely amend, alter or affect any power, preference or special right of the outstanding shares of our Series B Preferred Stock or the holders thereof without the affirmative vote of not less than two-thirds of the issued and outstanding shares of our Series B Preferred Stock.

UNREGISTERED SECURITIES

The following unregistered securities were issued during the period of November 1, 2004 through January 11, 2007:

Shares Issued

As discussed above, on November 17, 2004 and January 25, 2005, we sold 100,000 shares and 5,875 shares, respectively, of Series B Preferred Stock, which were not registered upon issuance to the initial purchasers. During fiscal 2006, we converted 41,755 shares of Series B Preferred Stock (the "Shares") into 3,553,615 shares of our common stock and at October 31, 2006, there were 64,120 shares of Series B Preferred Stock outstanding.

Warrants Issued

On April 6, 2004, we issued warrants to purchase 1,000,000 shares of our common stock to Marubeni Corporation (Marubeni) in conjunction with a revised distribution agreement. Pursuant to the terms of this agreement, Marubeni placed orders for 4 megawatts of DFC power plants, and committed to creating a sub-distributor network and to provide additional support for our products. All previously issued warrants to Marubeni were cancelled. As part of these warrant agreements, the warrants vest in separate tranches once Marubeni has ordered totals of between 5 MW and 45 MW of our products. As of October 31, 2006, 800,000 of these warrants had expired. The exercise price of the remaining 200,000 warrants (which are not vested) is $18.73 per share and the warrants will expire April 2007, if not earned and exercised sooner.

On July 7, 2005, we issued warrants to purchase up to an aggregate of 1,000,000 shares of our common stock to Enbridge Inc. (Enbridge) in conjunction with an amended distribution agreement. All previously issued warrants to Enbridge were cancelled. The warrants vest on a graduated scale based on the total number of megawatts contained in product orders and the timing of when such orders are generated by Enbridge. In October 2006, Enbridge placed a qualifying order resulting in vesting of 30,000 warrants with an exercise price of $9.89. The expiration date of these vested warrants is October 31, 2008. The exercise prices of the remaining 970,000 warrants not vested range from $9.89 to $11.87 per share and the expiration dates range from June 30, 2008 to June 30, 2010, if not earned and exercised sooner.

Item 6. SELECTED FINANCIAL DATA

The selected consolidated financial data presented below as of the end of each of the years in the five-year period ended October 31, 2006 have been derived from our audited consolidated financial statements together with the notes thereto included elsewhere in this Report (the "Financial Statements"). The data set forth below is qualified by reference to, and should be read in conjunction with, the Financial Statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Report.

(Amounts presented in thousands, except for per share amounts)

Consolidated Statement of Operations Data:

	Year Ended October 31,				
	2006	**2005**	**2004**	**2003**	**2002**
Revenues:					
Product sales and revenue	$ 21,514	$ 17,398	$ 12,636	$ 16,081	$ 7,656
Research and development contracts	11,774	12,972	18,750	17,709	33,575
Total revenues	33,288	30,370	31,386	33,790	41,231
Costs and expenses:					
Cost of product sales and revenues	61,526	52,067	39,961	50,391	32,129
Cost of research and development contracts	10,330	13,183	27,290	35,827	45,664
Administrative and selling expenses	17,759	14,154	14,901	12,631	10,451
Research and development expenses	24,714	21,840	26,677	8,509	6,806
Purchased in-process research and development	—	—	12,200	—	—
Total costs and expenses	114,329	101,244	121,029	107,358	95,050
Loss from operations	(81,041)	(70,874)	(89,643)	(73,568)	(53,819)
License fee income, net	42	70	19	270	270
Interest expense	(103)	(103)	(137)	(128)	(160)
Loss from equity investments	(828)	(1,553)	—	—	—
Loss on derivatives	(233)	—	—	—	—
Interest and other income, net	5,951	5,526	2,472	6,012	4,876
Redeemable minority interest	107	—	—	—	—
Provision for taxes	—	—	—	—	(7)
Loss from continuing operations	(76,105)	(66,934)	(87,289)	(67,414)	(48,840)
Discontinued operations, net of tax	—	(1,252)	846	—	—
Net loss	(76,105)	(68,186)	(86,443)	(67,414)	(48,840)
Preferred stock dividends	(8,117)	(6,077)	(964)	—	—
Net loss to common shareholders	$ (84,222)	$ (74,263)	$ (87,407)	$ (67,414)	$ (48,840)
Basic and diluted loss per share:					
Continuing operations	$ (1.65)	$ (1.51)	$ (1.84)	$ (1.71)	$ (1.25)
Discontinued operations	—	(.03)	0.01	—	—
Net loss to common shareholders	$ (1.65)	$ (1.54)	$ (1.83)	$ (1.71)	$ (1.25)
Basic and diluted weighted average shares Outstanding	51,047	48,261	47,875	39,342	39,135

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Consolidated Balance Sheet Data:

	As of October 31,				
	2006	**2005**	**2004**	**2003**	**2002**
Cash, cash equivalents and short term investments (U.S. treasury securities)	$ 107,533	$ 136,032	$ 152,395	$ 134,750	$ 205,996
Working capital	105,868	140,736	156,798	143,998	218,423
Total current assets	133,709	161,894	178,866	160,792	234,739
Long-term investments (U.S. treasury securities)	13,054	43,928	—	18,690	14,542
Total assets	206,652	265,520	236,510	223,363	289,803
Total current liabilities	27,841	21,158	22,070	16,794	16,316
Total non-current liabilities	7,401	2,892	1,476	1,484	1,785
Redeemable minority interest	10,665	11,517	10,259	—	—
Redeemable preferred stock	59,950	98,989	—	—	—
Total shareholders' equity	100,795	130,964	202,705	205,085	271,702
Book value per share(1)	$ 1.90	$ 2.70	$ 4.21	$ 5.20	$ 6.93

(1) Calculated as total shareholders' equity divided by common shares issued and outstanding as of the balance sheet date.

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is provided as a supplement to the accompanying financial statements and footnotes to help provide an understanding of our financial condition, changes in our financial condition and results of operations. The MD&A is organized as follows:

Caution concerning forward-looking statements. This section discusses how certain forward-looking statements made by us throughout the MD&A are based on management's present expectations about future events and are inherently susceptible to uncertainty and changes in circumstances.

Overview and recent developments. This section provides a general description of our business. We also briefly summarize any significant events occurring subsequent to the close of the reporting period.

Critical accounting policies and estimates. This section discusses those accounting policies and estimates that are both considered important to our financial condition and operating results and require significant judgment and estimates on the part of management in their application.

Results of operations. This section provides an analysis of our results of operations for the years ended October 31, 2006, 2005 and 2004. In addition, a description is provided of transactions and events that impact the comparability of the results being analyzed.

Liquidity and capital resources. This section provides an analysis of our cash position and cash flows.

Recent accounting pronouncements. This section summarizes recent accounting pronouncements and their impact on the Company.

Factors that may affect future results. In this section, we detail risk factors that affect our quarterly and annual results, but which are difficult to predict.

CAUTION CONCERNING FORWARD-LOOKING STATEMENTS

The following discussion should be read in conjunction with the accompanying Consolidated Financial Statements and Notes thereto included within this report. In addition to historical information, this Form 10-K and the following discussion contain forward-looking statements. 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, general risks associated with product development, manufacturing, changes in the utility regulatory environment, potential volatility of energy prices, rapid technological change, ability to reach product cost objectives, and competition, as well as other risks set forth in our filings with the Securities and Exchange Commission including those set forth under the caption "Risk Factors" in this report.

OVERVIEW AND RECENT DEVELOPMENTS

Overview

FuelCell Energy, Inc. (the "Company", "we", "us" or "our") is a world leader in the development and manufacture of fuel cell power plants for ultra-clean, efficient and reliable electric power generation. Our products are designed to meet the 24/7 baseload power needs of commercial, industrial, government and utility customers. To date our products have generated over 150 million kilowatt hours of electricity and we have units operating at over 50 locations around the world.

We have been developing fuel cell technology since our founding in 1969. Our core carbonate fuel cell products ("Direct FuelCell® or DFC® Power Plants"), offer stationary applications for customers. In addition to our current commercial products, we continue to develop our next generation of carbonate fuel cell and hybrid products as well as planar solid oxide fuel cell ("SOFC") technology with our own and government research and development funds.

Our proprietary carbonate DFC power plants electrochemically (meaning without combustion) produce electricity directly from readily available hydrocarbon fuels, such as natural gas and biomass fuels. Customers buy fuel cells to improve reliability and reduce cost and emissions.

We believe our products offer significant advantages compared to other power generation technologies:

- Reliable 24/7 baseload power,
- High fuel efficiency,
- Ultra-clean (e.g. virtually zero emissions) quiet operation,
- Lower cost to generate electricity, and
- The ability to site units locally and provide high temperature heat for cogeneration applications.

Typical customers for our products include manufacturers, mission critical institutions such as correction facilities and government installations, hotels and customers who can use waste or byproducts of their operatons for fuel such as breweries, food processors and waste water treatment facilities. With increasing demand for renewable and ultraclean power options, and increased volatility and uncertainty in electric markets, our customers gain control of power generation economics, reliability and emissions. Our fuel cells offer flexible siting and easy permitting.

Through December 31, 2006, our cumulative fleet availability was greater than 90 percent. Our DFC power plants are protected by 46 U.S. and 74 international patents and we have also submitted 38 U.S. and 123 international patent applications.

Our business strategy is to expand our leadership position in key markets, build multi-megawatt markets and continue to reduce the costs of our products. We believe that with the emergence of the RPS markets, the growth of the California market and continuing product cost reduction, we are well positioned to move to profitability. At a sustained annual order and production volume of approximately 35 MW to 50 MW, depending on product mix, geographic location and other variables such as fuel prices, we can reach gross margin breakeven. Our net income break-even can be achieved at a sustained annual order and volume production of approximately 75-100 MW assuming a mix of sub-MW and MW sales. Our 2.4 MW product currently has a production cost at market clearing prices in certain regions such as Connecticut. Thus, if product mix trends more toward MW and multi-MW orders, then we believe that company profitability can achieved at annual volumes lower than 75 MW.

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Recent Developments

Change in Executive Management

On January 12, 2006, FuelCell Energy, Inc. announced that R. Daniel Brdar was promoted to President and Chief Executive Officer. Effective January 12, 2007, R. Daniel Brdar was appointed Chairman of the Board. Jerry D. Leitman resigned as Chairman of the Board and as a member of the Company's Board.

On February 15, 2006, Dr. Hans Maru retired as Chief Technology Officer, but will remain as a consultant to the Company. The Chief Technology Officer responsibilities have been assumed by executives within the Company.

On April 17, 2006, Bruce Ludemann was named Senior Vice President of Sales and Marketing for the Company and has been focusing on MW and multi-MW sales opportunities and developing repeatable customers in the Company's key global markets.

Conversion of Series B Cumulative Convertible Preferred Stock

We have completed transactions with certain holders of the Company's Series B Cumulative Convertible Preferred Stock to convert an aggregate of 41,755 shares of Series B Preferred Stock into approximately 3.6 million shares of common stock. Pursuant to the conversion of the preferred shares, we have paid the holders a per share conversion premium of approximately $4.3 million or an average of $103.02 per share of Series B Preferred Stock. This conversion resulted in a charge to preferred stock dividends on the consolidated statement of operations of $4.3 million or $0.08 per basic and diluted share for the fiscal year ended October 31, 2006. As a result of this conversion, quarterly dividend obligations have been reduced by approximately $0.5 million or $0.01 per basic and diluted share, which began in the third quarter of fiscal 2006.

Common Stock Offering

During fiscal 2006, we sold 681,000 shares of our common stock on the open market pursuant to a S-3 registration statement filed in June 2005. Total net proceeds to us from the sale of these securities was approximately $8.0 million and was used to pay the $4.3 million conversion premium on the converted shares of our Series B Preferred Stock and to make dividend payments on our Series B Preferred Stock.

2006 Equity Incentive Plan

In February 2006, the Board adopted the Company's 2006 Equity Incentive Plan (the "2006 Plan"). This plan was approved by shareholders at the Company's March 2006 Annual Meeting. The purpose of the 2006 Plan is to attract and retain key employees, directors, advisors and consultants to provide an incentive for them to assist the Company to achieve long-range performance goals and to enable them to participate in the long-term growth of the Company. There are a total of 2,500,000 shares of Common Stock available for issuance under the 2006 Plan, subject to adjustment for any stock dividend, recapitalization, stock split, stock combination or certain other corporate reorganizations.

Adoption of Statement of Financial Accounting Standard No. 123R, "Share-Based Payments"

On November 1, 2005, we adopted Statement of Financial Accounting Standard No. 123R, "Share-Based Payments" (SFAS 123R), which revised SFAS No. 123, "Accounting for Stock-Based Compensation". This statement supercedes APB Opinion No. 25, "Accounting for Stock Issued to Employees." The revised statement addresses the accounting for share-based payment transactions with employees and other third parties, eliminates the ability to account for share-based compensation transactions using APB 25 and requires that the compensation costs relating to such

transactions be recognized in the consolidated statement of operations. Share-based compensation of $4.4 million was recognized in the consolidated statement of operations for the fiscal year ended October 31, 2006. Refer to Note 14 of the consolidated financial statements for additional information.

Change in Accounting for Series 1 Preferred Shares and Derivative Liability

In the fourth quarter of 2006, the Company recorded a cumulative net charge of $0.1 million to the consolidated statement of operations to correct an accounting error related to the Series 1 Preferred shares of FuelCell Energy, Ltd (a wholly-owned subsidiary of the Company). This net charge was recorded in the consolidated statement of operations as a loss on derivatives of $0.2 million and a gain related to redeemable minority interest of $0.1 million. Prior to this change in accounting, the Series 1 Preferred shares were reported in shareholders' equity as Preferred shares of subsidiary. We have concluded that these shares should be accounted for as a redeemable minority interest in FuelCell Energy, Ltd. As a result, we have reclassified the Preferred shares of subsidiary totaling $10.7 million and $11.5 million as of October 31, 2006 and 2005, respectively to Redeemable minority interest on the consolidated balance sheets. Additionally, in the consolidated balance sheet as of October 31, 2005, we have reclassified to accumulated deficit the accretion of the fair value discount on the Series 1 Preferred shares and dividends paid on these shares, which had previously been reported in additional paid-in-capital. No revisions have been made to the historical consolidated statements of operations.

As part of this accounting change, we determined that the Series 1 Preferred shares include embedded derivatives (the conversion feature of the security and its variable dividend obligation) which require bifurcation from the host contract and separate accounting in accordance with SFAS 133, *Accounting for Derivative Instruments and Hedging Activities.* This derivative liability is classified as a component of Long-term debt and other liabilities on the Consolidated Balance Sheets. Refer to Note 12 of Notes to Consolidated Financial Statements for additional information.

Reclassification of Series B Cumulative Convertible Perpetual Preferred Stock

EITF Topic D-98, "Classification and Measurement of Redeemable Securities", requires that if registered securities are required to be issued, that maintaining registration may be outside of the Company's control. Accordingly, we have reclassified the Series B Preferred stock into a temporary equity classification (outside of the general heading of shareholders' equity) as of October 31, 2005 because we are unable to ensure that registered shares of our common stock will be available to pay the redemption price. Notwithstanding the foregoing, it is the Company's intent to convert or pay any potential redemption price on the Series B Preferred stock through the issuance of our common stock, if possible.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Revenue Recognition

We contract with our customers to perform research and development, manufacture and install fuel cell components and power plants under long-term contracts, and provide services under contract. We recognize revenue on a method similar to the percentage-of-completion method.

Revenues on fuel cell research and development contracts are recognized proportionally as costs are incurred and compared to the estimated total research and development costs for each contract. In many cases, we are reimbursed only a portion of the costs incurred or to be incurred on the contract. Revenues from government funded research, development and demonstration programs are generally multi-year, cost reimbursement and/or cost shared type contracts or cooperative agreements. We are reimbursed for reasonable and allocable costs up to the reimbursement limits set by the contract or cooperative agreement.

While government research and development contracts may extend for many years, funding is often provided incrementally on a year-by-year basis if contract terms are met and Congress has authorized the funds. As of October 31, 2006, research and development sales backlog totaled $30.1 million, of which 28 percent is funded. Should funding be temporarily delayed or if business initiatives change, we may choose to devote resources to other activities, including internally funded research and development.

Product sales and revenues include revenues from power plant sales, service contracts, electricity sales under power purchase agreements (“PPAs”) and incentive funding. Revenues from power plant sales are recognized proportionally as costs are incurred and assigned to a customer contract by comparing the estimated total manufacture and installation costs for each contract to the total contract value. Revenues from service contracts are generally recognized ratably over the contract. For service contracts that include a fuel cell stack replacement, a portion of the total contract value is recognized as revenue at the time of the stack replacement and the remainder of the contract value is recognized ratably over the contract. Revenues from electricity sales under power purchase agreements are recognized as power is produced. Revenues from incentive funding are recognized ratably over the term of the incentive funding agreement.

As our fuel cell products are in their initial stages of development and market acceptance, actual costs incurred could differ materially from those previously estimated. Once we have established that our fuel cell products have achieved commercial market acceptance and future costs can be reasonably estimated, then estimated costs to complete an individual contract, in excess of revenue, will be accrued immediately upon identification.

Warrant Value Recognition

Warrants have been issued as sales incentives to certain of our distribution partners. These warrants vest as orders from our business partners exceed stipulated levels. Should warrants vest, or when management estimates that it is probable that warrants will vest, we record a proportional amount of the fair value of the warrants against related revenue as a sales discount.

Inventories

During the procurement and manufacturing process of a fuel cell power plant, costs for material, labor and overhead are accumulated in raw materials and work-in-process inventory until they are transferred to a customer contract, at which time they are recorded in cost of sales.

Our inventories and advance payments to vendors are stated at the lower of cost or market price. As we currently sell products at or below cost, we provide for a lower of cost or market ("LCM") adjustment to the cost basis of inventory and advances to vendors. This adjustment is computed by comparing the current sales prices of our power plants to estimated costs of completed power plants. In certain circumstances, for long-lead time items, we will make advance payments to vendors for future inventory deliveries, which are recorded as a component of other current assets on the consolidated balance sheet.

As of October 31, 2006 and October 31, 2005, the LCM adjustment to the cost basis of inventory and advance payments to vendors was approximately $11.3 million and $8.0 million, respectively, which equates to a reduction of approximately 43 and 39 percent, respectively, of the gross inventory value. As of October 31, 2006, our gross inventory and advances to vendors' balances increased from the October 31, 2005 balances which resulted in higher gross reserve balances. As inventory levels increase or decrease, appropriate adjustments to the cost basis are made.

Internal Research and Development Expenses

We conduct internally funded research and development activities to improve current or anticipated product performance and reduce product life-cycle costs. These costs are classified as research and development expenses on our consolidated statements of operations.

Share-Based Compensation

On November 1, 2005, we adopted Statement of Financial Accounting Standard No. 123R, "Share-Based Payments" (SFAS 123R). Share-based payment transactions with employees, which primarily consist of stock options, and third parties requires the application of a fair value methodology that involves various assumptions. The fair value of our options awarded to employees is estimated on the date of grant using the Black-Scholes option valuation model that uses the following assumptions: expected life of the option, risk-free interest rate, expected volatility of our common stock price and expected dividend yield. We estimate the expected life of the options using historical data and the volatility of our common stock is estimated based on a combination of the historical volatility and the implied volatility from traded options. Share-based compensation of $4.4 million was recognized in the consolidated statement of operations for the fiscal year ended October 31, 2006. Refer to Note 14 of the consolidated financial statements for additional information.

RESULTS OF OPERATIONS

Management evaluates the results of operations and cash flows using a variety of key performance indicators. Indicators that management uses include revenues compared to prior periods and internal forecasts, costs of our products and results of our "cost-out" initiatives, and operating cash use. These are discussed throughout the 'Results of Operations' and 'Liquidity and Capital Resources' sections.

Comparison of the Years Ended October 31, 2006 and October 31, 2005

Revenues and costs of revenues

The following tables summarize our revenue mix for the years ended October 31, 2006 and 2005 (dollar amounts in thousands), respectively:

	Year Ended October 31, 2006		Year Ended October 31, 2005		Percentage Increase / (Decrease) in Revenues
	Revenues	Percent of Revenues	Product Revenues	Percent of Revenues	
Revenues:					
Product sales and revenues	$ 21,514	65%	$ 17,398	57%	24%
Research and development contracts	11,774	35%	12,972	43%	(9)%
Total	$ 33,288	100%	$ 30,370	100%	10%

	Year Ended October 31, 2006		Year Ended October 31, 2005	Percentage Increase / (Decrease) in Costs of Revenues
	Costs of Revenues	Percent of Costs of Revenues	Costs of Revenues	