

FUELCELL ENERGY INC

Form 10-K

January 14, 2010

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**  
**For the fiscal year ended October 31, 2009**  
**OR**

**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**

(State or other jurisdiction of incorporation or organization)

**06-0853042**

(I.R.S. Employer Identification No.)

**3 Great Pasture Road  
Danbury, Connecticut**

(Address of principal executive offices)

**06813**

(Zip Code)

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

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Name of each exchange on which registered

Common Stock, \$.0001 par value per share

The Nasdaq Stock Market LLC (Nasdaq Global Market)

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes  No

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  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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.

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
 (Do not check if a smaller reporting company)

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

As of April 30, 2009, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$214,314,020 based on the closing sale price of \$3.18 as reported on the NASDAQ Global Market.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Class	Outstanding at January 5, 2010
Common Stock, \$.0001 par value per share	84,371,788 shares

**DOCUMENTS INCORPORATED BY REFERENCE**

Document	Parts Into Which Incorporated
Annual Report to Shareholders for the Fiscal Year Ended October 31, 2009 (Annual Report)	Parts I, II, and IV
Proxy Statement for the Annual Meeting of Shareholders to be held March 25, 2010 (Proxy Statement)	Part III

**FUELCELL ENERGY, INC.**  
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When used in this report, the words expects, anticipates, estimates, should, will, could, would, may, expressions are intended to identify forward-looking statements. Such statements relate to the development and commercialization of FuelCell Energy, Inc. and its subsidiaries (FuelCell Energy, Company, we, us and our), technology and products, future funding under government research and development contracts, the expected cost competitiveness of our technology, and our ability to achieve our sales plans and cost reduction targets. 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 manufacturing, 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, competition and changes in accounting policies or practices adopted voluntarily or as required by accounting principles generally accepted in the United States, as well as other risks contained under Item 1A Risk Factors 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 Item 1A Risk Factors 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 user. 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); kilowatt (kW) and megawatt (MW) numbers designate nominal or rated capacity of the referenced power plant; efficiency or electrical efficiency means the ratio of the electrical energy 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 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; kW means 1,000 watts; MW means 1,000,000 watts; kilowatt hour (kWh) is equal to 1kW of power supplied to or taken from an electric circuit steadily for one hour; and one British Thermal Unit (Btu) is equal to the amount of heat necessary to raise one pound of pure water from 59°F to 60°F at a specified constant pressure.

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



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**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 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 period hours since commercial acceptance date (mutually agreed upon time period when our Direct FuelCell ( 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.

**Balance of Plant ( BOP )** Consists of the remaining systems, components, and structures that comprise a complete power plant or energy system that are not included in the fuel cell stack module. We manufacture the fuel cell stack module and procure the BOP (items such as fuel handling, processing equipment and electrical interface equipment such as inverters to convert the fuel cell stack module's DC electricity output to AC) from third parties.

**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.



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***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 to 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. Also referred to as ***Renewable Energy Standard ( RES )*** when referring to clean energy standards mandated by the U.S. government and South Korea.

***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.

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**Item 1. BUSINESS**

We are a world leader in the development and production of stationary fuel cells for commercial, industrial, government and utility customers. Our ultra-clean, high efficiency Direct FuelCell® power plants are generating power at over 55 locations worldwide. Our products have generated over 400 million kWh of power using a variety of fuels including renewable wastewater gas, food and beverage waste, natural gas and other hydrocarbon fuels.

Our Company was founded in Connecticut in 1969 and reincorporated in Delaware in 1999. Our core fuel cell products ( Direct FuelCell® or DFC® Power Plants ) offer higher efficiency stationary power generation for customers. In addition to our commercial products, we continue to develop our carbonate fuel cells, planar solid oxide fuel cell ( SOFC ) technology and other fuel cell technology with our own and government research and development funds. Our proprietary carbonate DFC Power Plants electrochemically (without combustion) produce electricity directly from readily available hydrocarbon fuels such as natural gas and biogas. Customers buy fuel cells to reduce cost and pollution, and improve power reliability. Electric generation without combustion significantly reduces harmful pollutants such as NOX, SOX and particulates. Higher fuel efficiency results in lower emissions of carbon dioxide ( CO2 ), a major greenhouse gas, and also results in less fuel needed per kWh of electricity generated and Btu of heat produced. Greater efficiency reduces customers' exposure to volatile fuel costs and minimizes operating costs. Our fuel cells operate 24/7 providing reliable power to both on-site customers and for grid-support applications.

Compared to other power generation technologies, our products offer significant advantages including:

- Near-zero toxic emissions;
- High fuel efficiency;
- Ability to site units locally as distributed power generation;
- Potentially lower cost power generation;
- Byproduct heat ideal for cogeneration applications;
- Reliable 24/7 base load power;
- Quiet operation; and
- Fuel flexibility.

Typical customers for our products include manufacturers, mission critical institutions such as correction facilities and government installations, hotels, natural gas letdown stations and customers who can use renewable gas for fuel such as breweries, food processors, and wastewater treatment facilities. Our MW-class products are also used to supplement the grid for utility customers. With increasing demand for renewable and ultra-clean power options and increased volatility in electric markets, our customers gain control of power generation economics, reliability, and emissions.

Our DFC Power Plants are protected by 58 U.S. and 74 international patents. We currently have 38 U.S. and 154 international patents under application.

**2009 Update**

FuelCell Energy's path to profitability is based on two primary drivers: increasing order flow in our key markets and aggressively driving down our product costs. In 2009, our order flow was consistent with 2008 and we began producing our new lower cost MW-class products in the third quarter.

In fiscal 2009, customers ordered 32.8 MW of fuel cells compared to 32.3 MW in the prior year. We ended fiscal 2009 with 43.7 MW in backlog with over 96 percent for our multi-megawatt products, modules and module kits. Additionally, we installed 23 MW of our MW-class power plants in South Korea—half our current worldwide installed base.

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We began production of our newest MW-class power plants in the third fiscal quarter of 2009. The new design incorporates new stacks with outputs of 350 kW each compared to 300 kW previously, along with lower component and raw material costs derived from process improvements, volume manufacturing and global sourcing. We expect these new products will result in gross margin improvement on a unit by unit basis. Together with increased manufacturing volume, improved gross margins on these products are expected to move us to profitability. Increased volume enables several areas of continued cost reduction, including expansion of our global sourcing program, larger volume purchases, more competition among our suppliers, increased utilization of our factory capacity, and increased productivity and automation in our facilities and supply chain.

In October, we concluded a licensing agreement with POSCO Power ( POSCO ) that enables them to assemble, test and condition fuel cell stack modules using components manufactured by us. This agreement will expand the total production capacity of our products, contribute to further cost reduction and support the continued expansion of our fastest growing market, South Korea. Localizing certain manufacturing is a key component of our strategy to lower costs while further penetrating key markets.

Actual production in fiscal 2009 was approximately 30 MW compared to approximately 22 MW in 2008. Our annualized manufacturing run rate is currently 30 MW for our power plants, modules and components.

**Markets**

The market for alternative energy power generation is growing both in the U.S. and abroad and we expect to continue to benefit from this momentum. Driving this growth are concerns about the limited supply and rising cost of fossil fuels and environmental concerns. More than 66 percent of the world's electric power is generated from carbon-based fossil fuels, and this is forecasted to continue to increase for some time. With the primary source of electric generation still driven by fossil fuels, we believe markets need new power generation products like our fuel cells that are not only more efficient and environmentally superior, but also cost effective and reliable.

***On-Site Power***

Stationary fuel cell power plants can be an economical alternative to utility-provided power and other distributed generation products. Wastewater treatment facilities and brewery companies, for instance, can use methane, a byproduct of their own processes, to operate renewable fuel cell power plants. This allows them to eliminate gas flaring and the use of conventional combustion-based power generation equipment, both of which add to pollution. These facilities also reduce their operating costs because our fuel cell power plants can be up to 90 percent efficient when operated in combined heat and power ( CHP ) mode and produce significantly more high-value electricity than competing technologies. Customers also gain the added benefits of quiet operation and improved power reliability.

***Utility or RPS***

States seeking to secure cleaner energy sources and greater energy independence are setting renewable portfolio standards ( RPS ) that require utilities to provide a certain amount of their electricity from renewable sources such as solar, wind, biomass-fueled technologies, and fuel cells. There are currently 28 states and the District of Columbia that have instituted RPS mandates. These markets represent a potential for an estimated 88,000 MW by 2025. Fuel cells using biogas fuels qualify as renewable power generation technology in all of the RPS states, with some states specifying that fuel cells operating on natural gas are also eligible for these initiatives.

Fuel cells can play a critical role in meeting RPS clean power mandates by generating highly efficient, 24/7 electricity that can balance other forms of intermittent power generation such as wind and solar as they are incorporated into the electric grid infrastructure. Increased use of wind, solar and traditional generation requires upgrades to the transmission and distribution system, whereas our fuel cells fit into the existing grid, augmenting power where needed. By producing power locally in the distribution system, our fuel cells can ease grid constraints and enable increased wind or solar power in the system.

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**Business Strategy**

Our business strategy is to expand our leadership position in key markets, build renewable portfolio standards markets and continue to reduce the cost of our products. We believe a production mix more heavily weighted with MW-class products is our fastest path to achieve profitability. Our focus continues to be:

***Build on our leadership position in geographic and vertical markets***

Increased orders from our target markets are key to our profitability. In many regions around the world, there is growing adoption of clean, low carbon technologies. Countries are also looking to green technologies as a way to turn around their economies. This attention to clean energy technologies is driving policy in South Korea, Europe and the U.S.

**South Korea:** Ultra-clean, highly efficient fuel cell power plants meet South Korea's need for increased production of clean power with green technologies that contribute to increased domestic employment as well as its mandate for clean energy generation. South Korea has committed 2 percent of its gross national product to clean energy projects more than any other developed country. Currently, South Korea is pursuing the passage of an \$85.8 billion renewable energy plan that includes a RES of 4.3 percent clean energy by 2015, or approximately 2,800 MW and 11 percent clean energy by 2030, or approximately 7,150 MW. Stationary fuel cells operating on natural gas are expected to be included in the program and our products should be well positioned to contribute significantly to this goal. The South Korean government's proposed energy policy is an example of a strategy to meet both the country's domestic energy and environmental objectives and to create a green technology industrial base that will become the foundation for a global export market.

POSCO ordered 30.8 MW of our DFC Power Plants during fiscal 2009, bringing POSCO's total orders to date to 69 MW. Approximately 23 MW are now installed and operating at customer sites in South Korea, of which six are our 2.4 MW DFC3000 power plants. Five of these power plants are operating at large independent power producers and one is operating at a KEPCO subsidiary (South Korea's electric utility). These are serving as showcase sites as POSCO executes its strategy to make our power plants the leading alternative for utilities seeking to comply with the country's RES program.

In 2009, we entered into a Stack Technology Transfer and License Agreement (the 2009 License Agreement) with POSCO, allowing it to produce fuel cell stack modules from cells and components provided by us. This agreement is part of our strategy to localize certain power plant manufacturing. Locating final assembly closer to end users reduces costs, ensures products meet the needs of individual markets, and in effect, expands our manufacturing capacity. Localizing fuel cell module assembly and conditioning has important benefits for both parties. It allows POSCO more domestic content, supporting its work with the South Korean government to pass enabling legislation. It also drives increased demand for our cell components. As a result of the new license, we can continue to reduce product costs for the Asian market through lower shipping costs, import duties and taxes.

POSCO has already built a 50 MW manufacturing facility which produces balance-of-plant (BOP) systems, which will be integrated with fuel cell modules at customer sites, and they will build an additional facility to assemble and manufacture fuel cell modules, effectively increasing worldwide capacity for our DFC Power Plants.

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**California:** California has been on the leading edge of clean technology adoption, and is currently our second biggest market after South Korea. Our sales pipeline in California continues to grow and we are working to close orders as evidenced by 2009 orders from Sonoma County and the City of Tulare. Order closure from our California project opportunities were significantly impacted during the year as our partners and end user customers dealt with the lack of available financing for all types of power generation projects. We are beginning to see the return of traditional project financing in some parts of the power generation market.

In support of these opportunities, California again demonstrated its commitment to reducing greenhouse gases and encouraging clean distributed generation by extending its Self-Generation Incentive Program ( SGIP ) through 2015. Under this program, qualifying fuel cell projects of up to 3 MW are eligible for incentives of up to \$4,500 per kilowatt when operating on biogas and up to \$2,500 per kilowatt when operating on natural gas. Currently there is about \$200 million in the program and ongoing annual funding is expected to be roughly \$83 million. Those planning capital projects like wastewater treatment plants now have the certainty the SGIP will be available for several more years.

The California legislature has passed two feed-in tariffs. One was for combined heat and power projects under which our fuel cell projects qualify. The second was a renewable feed-in-tariff signed in October. Once the feed-in-tariffs are set, they could enable power producers to export excess electricity back into the grid. The feed-in-tariffs could make it more economically attractive to generate power using fuel cells, and lead to wider deployment. The California Public Utilities Commission is currently working to set pricing for these tariffs and we expect the commission to rule in 2010.

To date, our focus has been on capturing geographic markets. The South Korean market uses fuel cells for grid support, the California market uses fuel cells for onsite distributed generation, and Connecticut is using fuel cells to satisfy its RPS requirements. We expect to continue to expand geographically in the US, Canada and Europe. As a result of success in the initial geographical markets, several FuelCell Energy products are attracting vertical markets. Fuel cells operating on biogas are attracting worldwide interest with their low cost fuel and renewable status. Our pipeline application product, the DFC-ERG power plant, is attracting global interest because it provides a better environmental, operating and cost solution for gas utilities pipeline letdown processes.

**Wastewater Treatment / Biofuels** The wastewater treatment market, which utilizes renewable fuel, has immediate global potential. In California, we have approximately 40 percent of our installations running on biogas produced by the wastewater treatment process. Our units reduce emissions, CO<sub>2</sub> and costs. The heat from our power plants is used in the anaerobic digester so in addition to saving on electricity costs, customers save on fuel costs. This type of combined heat and power application can yield an efficiency up to 90 percent.

**Natural Gas Pipeline Applications** Our DFC-ERG system, developed with our partner Enbridge Inc. ( Enbridge ), is specifically designed for natural gas pressure letdown stations. Natural gas is piped under high pressure over long distances and the pressure must be reduced at letdown stations before it can be distributed locally. Consequently, almost every pressure letdown station worldwide is a potential candidate for our DFC-ERG, in which our fuel cell is coupled with a turbo expander. The resulting electrical efficiency is typically 60 percent, which is nearly twice as efficient as the average U.S. central generation fossil fuel power plant. Our first DFC-ERG power plant went into operation in Toronto last year and four DFC-ERG power plants were approved by the Connecticut Department of Public Utility Control ( DPUC ). This market has been estimated at 250 to 350 MW in just the Northeastern U.S., northern California and Toronto.

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

***Build Renewable Portfolio Standards Markets***

RPS programs mandate that a certain percentage of electricity be generated from renewable and ultra-clean resources. Our multi-MW products, which are scalable to utility sized installations and our natural gas pipeline applications, are well suited to address these markets.

***Connecticut*** Connecticut's RPS requires utilities to purchase 20 percent of their peak electricity needs, or about 1,000 MW, from clean power sources by 2020. During 2009, Connecticut's DPUC finalized the selection of 27.3 MW of projects incorporating our power plants, bringing the total approved projects to 43.5 MW. All of the projects utilize our 2.8 MW DFC3000 power plants either alone or in combination with turbines.

Each of these projects has executed power purchase agreements with utilities. The Company and project developers are in discussions with financiers to fund the projects. We have also submitted and are going through an application review process for these projects under the U.S. Department of Energy's (DOE) \$6 billion loan guarantee program.

Additionally, Congress is seeking solutions to address environmental problems that could result in a federal energy bill beneficial for fuel cells. Its actions could result in a national renewable energy standard a federal RPS and longer term, the implementation of cap and trade policies. The Environmental Protection Agency (EPA) has recently signaled its intent to issue new CO2 regulations. This heightened attention to the need for clean energy solutions should prove beneficial given our products' high efficiency, low CO2 emissions and near-zero regulated emissions.

***Continue to Reduce Product Costs***

Product cost reductions are essential for us to more fully penetrate the market for our fuel cell products and attain profitability. Cost reductions will also reduce or eliminate the need for incentive funding programs which currently allow us to price our products to compete with grid-delivered power and other distributed generation technologies. Product cost reductions come from several areas such as:

- engineering improvements;
- technology advances;
- supply chain management;
- production volume; and
- manufacturing process improvements.

Since 2003, we have made significant progress in reducing the total life cycle costs of our power plants primarily through value engineering our products, manufacturing process improvements, technology improvements, and global sourcing.

During 2009, we began production of our lower-cost, higher-output DFC1500 and DFC3000 models incorporating 350 kW stacks. The new DFC1500 generates 1.4 MW of power and the DFC3000 generates 2.8 MW of power. By producing more power in a power plant, the power plants cost less per unit to manufacture. We believe that with sufficient sales volume, production of these lower cost MW-class power plants will move our Company to profitability. We are also developing and expect to bring to market products with a stack life greater than five-years. Extending stack life increases the sales value of the product and reduces service costs.

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We sell completed power plants, fuel cell modules and fuel cell module kits (components). Based on the current backlog, we expect the mix of production to move primarily to 1.4 MW modules and kits in 2010. We believe we can reach gross margin breakeven at a sustained annual order and production volume of approximately 35 to 70 MW and net income breakeven at a sustained annual order and production volume of approximately 75 to 125 MW. The low end for each of these ranges requires sustained annual production primarily of our DFC3000 power plants and fuel cell modules and the high end of the range includes a mix of our DFC1500 and DFC300 power plants. Actual results will depend on product mix, volume, mix of full power plants vs. modules only, future service costs, and market pricing.

**Products**

Our core DFC Power Plant products are the 300 kW DFC300, the 1.4 MW DFC1500, and the 2.8 MW DFC3000. Our 2.8 MW product is scalable to utility sized applications. We also manufacture and install multi-megawatt DFC-ERG power plants for use in natural gas pipeline applications and DFC/Turbine power plants for large load users. The DFC-ERG and DFC/Turbine power plants are our highest-efficiency products and are nearly twice as efficient as the average U.S. central generation fossil fuel power plant.

A fuel cell chemically converts a hydrocarbon fuel into electricity without combustion. The primary byproducts of the fuel cell process are heat and water. Carbon dioxide is an additional byproduct although the high efficiency results in significantly less CO<sub>2</sub> per unit of power production compared to the average U.S. fossil fuel power plant as well as small gas and microturbines. A fuel cell power plant can be thought of as having two basic segments: the fuel cell stack module that actually produces the electricity, and the BOP that includes various fuel handling and processing equipment such as pipes and blowers, and electrical interface equipment. Our fuel cells produce near zero SOX, NOX or particulate matter emissions.

Our fuel cells operate on a variety of hydrocarbon fuels, including natural gas, methanol, diesel, biogas, coal gas, coal mine methane and propane. DFC Power Plants are designed to achieve electrical efficiencies of 47-60 percent depending on configuration, location, and application, and up to 90 percent total efficiency in combined heat and power applications. They are designed for distributed generation applications to meet the base load power requirements of our customers as well as grid support applications for utility customers. Our DFC Power Plants can be part of a total on-site power generation solution with our high efficiency products providing base load power along with grid-delivered electricity. Our power plants can also work in conjunction with intermittent power, such as solar, or less efficient combustion-based equipment that provide peaking and load following energy. Our products are also ideal to meet the needs of RPS mandates.

Conventional fossil fuel 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 and used to rotate a steam turbine generating additional electricity. The combustion process typically creates emissions of SOX, NOX, CO<sub>2</sub>, carbon monoxide, particulates and other air pollutants.

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

<b>Fuel Cell Type</b>	<b>Electrolyte</b>	<b>Electrical Efficiency Percentage</b>	<b>Electrical Efficiency With Bottom Cycle Percentage</b>	<b>Operating Temperature °F</b>	<b>Expected Capacity Range</b>	<b>Byproduct Heat Use</b>
PEM	Polymer Membrane	30-35	NA	180	5 kW to 250 kW	Warm Water
Phosphoric Acid	Phosphoric Acid	35-40	NA	400	50 kW to 200 kW	Hot Water
<b>Carbonate (Direct FuelCell®)</b>	<b>Potassium/Lithium Carbonate</b>	<b>45-50</b>	<b>58-65</b>	<b>1,200</b>	<b>300 kW to 2.8 MW and larger</b>	<b>Hot water or High Pressure Steam</b>
Solid Oxide	Stabilized Zirconium dioxide Ceramic	45-50	58-65	1,400-1,800	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 tubular 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 byproduct heat energy (700°F) that can be harnessed for 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. 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 products do not need to wait for the development of the hydrogen infrastructure for continued commercialization.

We have established a leading position in the sale of fuel cell power plants and strengthened our position by continuing to improve our products performance and availability, reducing costs for our products, and expanding repeatable markets for our products. Our cumulative fleet availability is approximately 90 percent. Availability percentage is calculated as the percentage that the 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.

**Markets and Applications**

The worldwide market for alternative energy power generation is growing and we expect to continue to benefit from this momentum. More than 66 percent of the world s electric power is generated from carbon-based fossil fuels, and this is forecasted to continue to increase for some time. Countries, states, provinces, cities and towns are looking for better solutions that use these fuels more efficiently, economically and at the same time, cleanly. With the primary source of electric generation still driven by fossil fuels, markets need new power generation products like DFC fuel cells that are not only more efficient and environmentally superior, but also cost effective and reliable.

Governments around the world, including the U.S., South Korean and many European governments, have tied the support of green energy programs to economic growth. In October 2008, the U.S. Congress extended the federal investment tax credit ( ITC ) for fuel cells eight years and increased the credit amount to \$3,000 per kW or 30 percent,



whichever is less. The American Recovery and Reinvestment Act ( ARRA ) enacted in February 2009 called for the creation of up to 5 million jobs through investments in efforts to build a clean energy future.

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In South Korea, the Ministry of Knowledge Economy designated fuel cells as a key economic driver for the country under President Lee Myung-bak's green growth plan. The efficient production of electricity has important economic benefits for South Korea since it imports its fossil fuels. Ultra-clean, highly efficient fuel cell power plants meet South Korea's need for increased production of clean power with green technologies that contribute to increased domestic employment as well as its mandate for clean energy generation. Additionally, the country's clean energy program requires clean electricity to first be put on the utility grid, encouraging the deployment of MW-class systems. South Korea has committed to spend 2 percent of its gross national product for clean energy projects and is currently pursuing the passage of an \$85.8 billion renewable energy plan that includes a RES mandating 4.3 percent clean energy by 2015, approximately 2,800 MW, and 11 percent by 2030, approximately 7,150 MW. The RES is expected to include fuel cells operating on natural gas.

In the U.S., states seeking to secure cleaner energy sources and greater energy independence are setting RPS mandates that require utilities to provide a certain amount of their electricity from renewable sources such as solar, wind, biomass-fueled technologies, and fuel cells. There are currently 28 states and the District of Columbia that have instituted RPS mandates. These markets represent a potential for an estimated 88,000 MW by 2025. Fuel cells using biogas fuels qualify as renewable power generation technology in all of the RPS states, with some states and the District of Columbia specifying that fuel cells operating on natural gas are also eligible for these initiatives.

Fuel cells can play a critical role in meeting RPS clean power mandates by generating highly efficient, 24/7 electric power that also balances other forms of intermittent power generation such as wind and solar as they are incorporated into the electric grid infrastructure. Increased use of wind, solar and traditional generation requires upgrades to the transmission and distribution system, whereas our fuel cells fit into the existing grid, augmenting power where needed without requiring transmission and distribution equipment upgrades. By producing base load power locally in the distribution system, our fuel cells can ease grid constraints, making room for additional central wind or solar power generation in the system.

The wastewater treatment market continues to be among our strongest because our fuel cells are particularly economical and efficient for these customers. Since our fuel cells operate on the biogas produced by the wastewater treatment process and their byproduct heat is used in the treatment process, the efficiency of these installations can be as much as 90 percent. Fuel cells operating on biogas qualify for incentives in all 28 RPS states and the District of Columbia.

There are currently 9 MW of our DFC Power Plants installed or in backlog for wastewater treatment / biofuel applications. We believe the domestic market opportunity is approximately 500 MW. Based on our installed base, market support for our products, and our marketing focus in this area, we expect wastewater treatment facilities to continue to be a strong market for our products.

***Distributed Generation Markets and Applications***

We compete in the distributed generation marketplace. We believe distributed generation can be a more cost-effective solution than traditional grid-delivered electricity for the following reasons:

***Provides better economics*** Distributed generation avoids transmission and distribution system investment by using the existing infrastructure close to the end user. Distributed generation allows customers to use the heat byproduct from on-site power generation (combined heat and power or CHP) boosting efficiency and lowering energy costs. Distributed generation also offers the ability to control energy costs through fuel flexibility and efficiency. For example, wastewater treatment facilities and brewery companies can use methane, a byproduct of their own processes, to operate their fuel cell power plants. This allows them to eliminate gas flaring and the use of conventional combustion-based power generation equipment, both of which add to pollution. These facilities also reduce their operating costs because our DFC Power Plants can be up to 90 percent efficient when operated in CHP mode and produce significantly more high-value electricity than competing technologies. Customers also gain the added benefits of quiet operation and improved power reliability.



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***Increases reliability by locating power closer to the end user*** By locating smaller power plants on-site, power generation bypasses the congested transmission and distribution system and reduces dependence on a vulnerable centralized electrical infrastructure.

***Eases congestion in the transmission and distribution system*** Each kW of on-site power generation removes the need for the same amount from the centralized transmission and distribution system, easing congestion that can cause power outages and hastening grid recovery after the resolution of electrical infrastructure problems. In addition, distributed generation provides added strength to the grid by opening up distribution capacity for central wind or solar generation.

***Reduces the need for new large generation and associated transmission and distribution line investments and provides greater capacity utilization in less time*** On-site, 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 generation plants and transmission and distribution systems (often 36 months or longer) that require more extensive siting and right of way approvals. Siting distributed generation can defer or avoid massive transmission and distribution investment such as unpopular above ground high voltage lines or expensive underground high voltage lines.

***Enables the use of more renewable fuel for power generation*** Distributed generation enables end-users to use renewable biogas to generate high-efficiency, clean power, and reduces the need for fossil fuels.

***Promotes greater energy independence*** Distributed generation reduces dependence on foreign oil and on centralized power generation, giving customers more control over their power costs and supply. A byproduct of fuel cell power generation is high-temperature heat, which can be used for heating and air conditioning, reducing the need for heating oil.

Our fuel cell products are competitive in the marketplace because of superior product attributes including higher operational efficiency, lower emissions and the ability to utilize multiple fuels. Our fuel cells are unique among power generation technologies (including other fuel cells) in that they provide these attributes at a scale suitable to distributed generation. The only other commercial power generation technology with electrical efficiency comparable to our products combined cycle power plants achieves that efficiency only in sizes above 20 MWs. The fact that fuel cells provide their high efficiency at small sizes as well as in multi-megawatt class applications, combined with the ultra-clean and quiet operating characteristics, makes them an ideal power generation technology for distributed generation. While most small-scale technologies suffer from high emissions or low efficiency, our direct fuel cells provide the efficiency of a large combined cycle power plant in a size small enough to be located near the end user. This avoids the need to add transmission or distribution capacity, and provides a mechanism to strengthen the existing distribution system.

As we reduce our product costs, we are able to price our products competitively in the markets in which we compete. In California, for instance, 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, depending on location and application, which is a level competitive with grid-delivered electricity and other distributed generation products in our target markets. Tougher emission standards increase the cost of competing products and as our costs continue to come down, we become increasingly competitive in more markets.

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### ***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 products. Some of our strategic business partners include:

**POSCO** In February 2007, we signed a 10-year manufacturing and distribution agreement with POSCO to distribute and package DFC Power Plants in South Korea. POSCO has extensive experience in power plant project development, having built over 2,400 MW of power plants, equivalent to 3.7 percent of South Korea's national capacity. POSCO invested \$130 million in its 50 MW fuel cell BOP manufacturing facility in Pohang and began manufacturing operations in 2009.

In October 2009, we entered into the 2009 License Agreement allowing it to manufacture fuel cell stack modules from cell and module components provided by us. These fuel cell modules will be combined with BOP manufactured in South Korea to complete electricity-producing fuel cell power plants for sale in South Korea.

POSCO has ordered 69 MW of DFC Power Plants to date and approximately 23 MW of our DFC Power Plants are currently generating electricity for South Korea's power grid—half our current installed base. With the new license, POSCO will build an additional facility to assemble and manufacture fuel cell modules using components manufactured or supplied by FuelCell Energy.

**Enbridge, Inc.** We have a Market Development Agreement with Enbridge covering North America. Enbridge is a global leader in energy transportation and distribution that includes the DFC-ERG power plant that they co-developed with us. A 2.2 MW DFC-ERG unit was installed at Enbridge's headquarters in Toronto in 2008 and we were awarded contracts under Connecticut's Project 150 to install 18.8 MW of DFC-ERG power plants at four natural gas distribution stations, including a 9 MW DFC-ERG installation at a natural gas letdown station in Milford, Connecticut.

**Marubeni Corporation** We installed 4.75 MW with Marubeni. Four DFC300 units sold by Marubeni totaling 1 MW in output are operating at the Sharp Ltd. super-green factory in Kameyama Prefecture, where Sharp manufactures LCD screens for its flat-panel television displays. The 1 MW fuel cell installation provides base load power to the facility, while 5 MW of Sharp's own photovoltaic modules provide peaking power. Altogether, the system provides 30 percent of the plant's energy needs.

**Caterpillar, Inc.** DFC units were shipped to several commercial Caterpillar customers 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.

**Energy Service Company Distribution Partners** We also partner with energy service companies that have expertise in the markets where we compete. These partners include: Alliance Power, Inc., Chevron Energy Solutions and Logan Energy Corp.

### **Competition**

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

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

**Higher overall efficiency and lower carbon dioxide** Our DFC Power Plants are designed to achieve an electrical efficiency of 47 percent and overall energy efficiency up to 90 percent when operated in CHP mode. The higher the electrical efficiency, the more power generated with the least fuel, which results in lower CO<sub>2</sub>. DFC Power Plants generate only half the CO<sub>2</sub> of the average U.S. fossil fuel plant and near-zero NO<sub>x</sub>, SO<sub>x</sub> and particulate matter, compared with other technologies their size. Thus when operated in CHP applications, DFC fuel cells reduce CO<sub>2</sub> by roughly the same amount as other distributed generation technologies but they far surpass these technologies in reduction of NO<sub>x</sub>, SO<sub>x</sub> and particulate matter.

**Lower emissions** Our DFC Power Plant installations emit less CO<sub>2</sub>, and near zero SO<sub>x</sub>, NO<sub>x</sub> and particulate matter. They have been designated ultra-clean by the California Air Resources Board ( CARB ), and our products are certified to CARB 2007 emissions standards. Emissions of DFC Power Plants versus traditional combustion-based Power Plants are:

	Emissions (Lbs. Per MWh)					CO <sub>2</sub> with CHP	
	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>10</sub>	CO <sub>2</sub>			
Average U.S. Fossil Fuel Plant	5.06	11.6	0.27	2,031		NA	
Microturbine (60 kW)	0.44	.008	0.09	1,596	520	680	
Small Gas Turbine	1.15	.008	0.08	1,494	520	680	
DFC Power Plant	0.01	0.0001	0.00002	980	520	680	

**Fuel flexibility** Our DFC Power Plants can use many fuel sources, such as natural gas, renewable biogas from wastewater treatment facilities, food processors and breweries, and coal gas (escaping gas from active and abandoned coal mines as well as synthesis gas processed from coal). This enhances independence from imported oil and gives customers fuel flexibility, allowing them to choose the least expensive alternative.

**Provide end users with greater control of their energy costs** The high efficiency of our DFC Power Plants and 24/7 operation gives customers predictability and savings on energy costs. The cost of utility-provided power continues to rise and is subject to significant volatility. Generating on-site power with known generating costs from a DFC Power Plant gives customers a predictable component of their operations that can be budgeted and controlled.

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 stationary carbonate fuel cells. Emerging fuel cell technologies (and companies developing them) include PEM fuel cells (Ballard Power Systems, Inc.; United Technologies Corp. or UTC Power; and Plug Power), phosphoric acid fuel cells (UTC Power and Samsung Everland) and solid oxide fuel cells (Siemens Westinghouse Electric Company, General Electric, Delphi, Rolls Royce, Bloom Energy, 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, Ansaldo Fuel Cells in Italy is actively engaged in carbonate fuel cell development and is a potential competitor. Fuji Electric has been involved with both PEM and phosphoric acid fuel cells. In Korea, Doosan Corporation is engaged in carbonate fuel cell development.

Other than fuel cell developers, we must also compete with such companies as Caterpillar, Cummins, Wartsilla, MTU Friedrichshafen GmbH ( MTU ), Mitsubishi Heavy Industries 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. Electrical efficiency of these products can be competitive with our DFC Power Plants in certain applications. 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 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.



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**Manufacturing**

***Manufacturing Process***

We have 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 and then shipped to customer sites for installation with an assembled BOP.

***Capacity and Production Ramp-up***

Our overall manufacturing process (module manufacturing, final assembly, testing and conditioning) has a production capacity of 70 MW per year. To expand production capacity to 150 MW within our existing Torrington facility, we would need to make additional capital investments of \$35 to \$45 million. We also have additional land surrounding our Torrington facility, on which we may be able to expand to 400 MW of annual production of our repeating fuel cell components.

Expansion of our manufacturing facilities beyond 70 MW may also require new facilities for the fuel cell stack and module assembly, testing and conditioning, which could be deployed regionally. These regional facilities would be expected to provide additional cost savings due to the reduction in shipping costs, enhanced delivery times, and improved customer service.

Actual production in fiscal 2009 was approximately 30 MW compared to approximately 22 MW in 2008. Future production volumes will be adjusted depending on customer demand.

***Raw Materials and Supplier Relationships***

We use various raw materials and components to construct a fuel cell module, including nickel and stainless steel which are critical to our manufacturing process. Raw materials are sourced from multiple vendors and are not considered precious metals. In addition to manufacturing the fuel cell module in our Torrington facility, the electrical BOP and mechanical BOP are assembled by and procured from several key suppliers. All of our suppliers must undergo a qualification process, which takes four to 12 months. We continually evaluate new suppliers and are currently qualifying several new suppliers.

***Service and Warranty Agreements***

We offer comprehensive service and maintenance programs including total fleet management, refurbishment and recycling services and complete product support including spare parts inventory. In addition to the standard product warranty of one year, we also offer customers long-term service agreements ( LTSA ) for fuel cell power plants ranging from one to 13 years. Our standard LTSA term is five years and may be renewed if the parties mutually agree on future pricing. Pricing for service contracts is based upon the markets in which we compete as well as estimates of future costs.

Our services include a 24/7 call center and a web-based information system network that allows remote access to plant performance data. We have also established parts warehouses that include a pool of spare stacks in Connecticut and Asia. We have fully equipped regional field service teams, a stack repair/refurbishment center, and testing and conditioning facilities located in Connecticut. All personnel complete an operator and maintenance technician training program and work closely with the engineering and technology support organizations to service our products in the field. This infrastructure has enabled us to diagnose issues quickly and maintain high customer satisfaction.

Under the standard provisions of the LTSAs, we provide services to maintain, monitor, and repair customer power plants to meet minimum operating levels. Should the power plant not meet the minimum operating levels, we may be required to replace the fuel cell stack with a new or used replacement. Our contractual liability under LTSAs is limited to amount of service fees payable under the contract. This can often times be less than the cost of a new stack replacement. However, in order to continue to meet customer expectations on early product designs, we incur costs in excess of our contractual liabilities.



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We accrue for warranty costs on products that have sufficient operating experience to allow for management to reasonably estimate warranty obligations. For newer products where we have limited operating experience, warranty costs are currently expensed as incurred. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects. Given our products' early stage of development, actual expenses could be materially different than the contract price resulting in a loss.

**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 users such as Alliance Power in the U.S. After purchasing DFC Power Plants from us, they own and operate the units, and recognize revenue as energy is sold to the end user.

We seeded the market with a few PPAs to penetrate key target markets and develop operational and transactional experience. To date, we 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 percent ownership interest. As we enter into multi-megawatt projects in RPS markets with the benefit of the federal ITC and accelerated depreciation, we believe future PPAs will attract third party financing and ownership.

**Research and Development**

We perform both customer-sponsored and company-funded research and development projects. The goal of our research and development efforts is to improve our core products and expand our technology portfolio in complementary high temperature fuel cell systems. In addition, we are conducting development work on advanced applications for other fuel cell technologies, including SOFC and PEM.

The cost of customer sponsored research and development is classified as cost of research and development contracts in our consolidated financial statements. We also fund our own research and development projects including extending module life, increasing the power output of our modules and reducing the cost of our products. Company-funded research and development is included in research and development expenses in our consolidated financial statements. For the fiscal years ended 2009, 2008 and 2007, total customer-sponsored and company-funded research and development costs and expenses were \$30.4 million, \$39.5 million and \$40.9 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 Department of Defense ( DOD ), the EPA, the Defense Advance Research Projects Agency (DARPA) and the National Aeronautics and Space Administration (NASA). Government funding, principally from the DOE, provided 16 percent, 17 percent and 31 percent of our revenue for the fiscal years ended 2009, 2008 and 2007, respectively. From the inception of our carbonate fuel cell development program in the mid-1970s to date, more than \$550 million has been invested relating to government programs in support of the development of our DFC and related technologies.

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Significant research and development programs we are currently working on include:

**Direct FuelCell/Turbine** The DOE's Office of Fossil Energy established its Vision 21 Program in 1999 with the objective of developing a 21<sup>st</sup> Century Energy Plant that can generate electricity, heat, and hydrogen from a variety of feedstock such as fossil fuels and biomass with high efficiency and low environmental impact. Under this program, we were awarded a \$19.4 million cost-shared contract to develop a fuel cell/turbine hybrid power plant (DFC/Turbine). In 2006 and 2007, we successfully demonstrated a sub-MW DFC/Turbine power plant for 8,000 hours and achieved a 56 percent electrical efficiency. The conceptual design of a MW class DFC3000/T was completed in 2008.

Under Connecticut's RPS program, the Connecticut DPUC has approved projects incorporating our power plants totaling 43.5 MW. One of the projects approved was a 3.2 MW DFC/Turbine for an electrical substation.

**Co-production of Hydrogen and Electricity using DFC Power Plants** Our high temperature DFC power plant produces hydrogen internally from hydrocarbon fuels, and then converts it to electricity. These DFC products are capable of co-production of electricity and hydrogen at potentially attractive costs. This value-added proposition may be attractive for industrial users of hydrogen. It also provides a technology bridge to the hydrogen infrastructure being developed by DOE in our nation's bid for greater energy independence. A DOE-sponsored study performed by Air Products and Chemicals, Inc. (APCI), showed that a DFC300 power plant installed at a hydrogen refueling station for fuel cell vehicles can provide sufficient hydrogen to fuel a fleet of approximately 200 cars while providing enough electricity to power a community of 200 homes.

During 2005, we were selected by APCI to develop and demonstrate the next generation hydrogen energy station. The \$10 million cost-shared project, co-sponsored by DOE, APCI and ourselves, integrates 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, the DFC/H<sub>2</sub>, which can operate on pipeline natural gas and renewable fuels such as biogas. Air Products estimates that the DFC/H<sub>2</sub> system has the potential to be highly efficient and cost competitive with other conventional hydrogen production technologies. Under this program we have completed factory testing of the DFC/H<sub>2</sub> system in advance of a field demonstration.

We are also developing an electrochemical hydrogen separator (EHS). Under sponsorship from Connecticut Clean Energy Fund, we designed and built a sub-scale (2 kW) EHS stack, and delivered it to University of Connecticut for demonstration in February 2006 where it accumulated over six months of stable operation. Following this successful demonstration, we were awarded three contracts totaling \$4.3 million by the DOD to scale-up the EHS stack to the appropriate size for co-production of high purity hydrogen from our DFC300 power plants and complete in-house system testing. EHS provides an attractive alternative to mechanical separation technologies. Because it has no moving parts, it promises lower cost and the enhanced reliability needed for the hydrogen infrastructure.

**SECA and Large Scale Hybrid Programs** We are currently participating in Phase II of the DOE's Solid State Energy Conversion Alliance (SECA) Large Scale Hybrid Program. The goal of the program is to develop a multi-MW, highly efficient, central generation SOFC power plant operating on coal syngas. Phase I of the program was a two-year, \$32.3 million cost-shared program. Phase II, awarded in fiscal 2009 is a \$30.2 million program which began in January 2009 and extends through September of 2010.

Phase II of the program seeks to build a minimum 25 kW SOFC stack that meets certain performance requirements and cost targets as a manufactured product. The new stack will be integrated into a 250 kW to 1 MW fuel cell power module and a 5 MW proof-of-concept system operating on coal-based syngas (gas created from reacting coal with steam and oxygen). The module and proof-of-concept system will be designed, fabricated and tested in subsequent phases. During 2009, we met all of our interim program milestones for technical performance and cost.

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The advanced fuel cell system is expected to have an overall efficiency of at least 50 percent in converting energy contained in coal to ultra-clean grid electrical power. In contrast, today's average U.S. coal-based power plant has an electrical efficiency of approximately 33 percent. In addition, the envisioned SOFC-hybrid system is expected to separate 90 percent or more of the system's CO<sub>2</sub> emissions for capture and environmentally safe disposal while being cost competitive with other base load power generating technologies. The DOE anticipates commissioning multi-MW, proof-of-concept, coal-based power plant systems in the 2012 time frame.

We utilize the cell and stack design of our technology team partner, Versa Power Systems Inc. (Versa), for our SOFC development programs. Versa has been engaged in SOFC development since 1997 and is considered a world leader in SOFC cell and stack technology. We have been a prime contractor in the SECA program since 2003. WorleyParsons Group Inc. is another team member, providing engineering support for design of the SOFC power plants which run on syngas from coal.

During the current fiscal year, we will submit a formal proposal to DOE for negotiation of Phase III of the SECA Program. We anticipate Phase III will commence following completion of Phase II at the end of FY 2010. Under Phase III, we anticipate continued advances in SOFC stack and power plant designs, moving from a 250kW stack demonstration anticipated for 2012, to a 5MW proof-of-concept demonstration around 2015. Accomplishing these Phase III goals will require successful achievement of our SECA Phase II goals and selection by DOE for SECA Phase III, along with continued availability of DOE and cost-share funding.

### **Government Regulation**

Our Company and its products are 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 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 power plants, assuming no cogeneration application, are humid flue gas that is discharged at temperatures of 700-800°F, water that is discharged at temperatures of 10-20°F above ambient air temperatures, and CO<sub>2</sub> in per kW hour amounts much less than conventional fossil fuel central generation power plants. In light of the high temperature of the gas emissions, we are required 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 to be discharged into a storm drain or into the local wastewater system. Lastly, as with any use of hydrocarbon fuel, the discharge of emissions 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 of fuel cell power plants 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. We have 58 current U.S. patents (including one allowed in December 2009 by the U.S. Patent and Trademark Office for which issue is pending) and 74 international patents covering our fuel cell technology (in certain cases covering the same technology in multiple jurisdictions). Fifty-seven of our U.S. patents relate to our Direct FuelCell technology and one patent relates to PEM fuel cell technology. We also have submitted 38 U.S. and 154 international patent applications.

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Our patents will expire between 2010 and 2028, and the current average remaining life of our patents is approximately 11.2 years. During 2009, four new U.S patents were issued or allowed (including the patent allowed in December 2009) and two U.S. and 23 international patents expired or were abandoned. The expiration of these patents has no material impact on our current or anticipated operations. We also have approximately 28 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. U.S. patents that we own that resulted from government-funded research are subject to the government exercising march-in rights. We believe 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 previously had a Cell License Agreement whereby we licensed our DFC technology to MTU, a subsidiary of Tognum AG, for use exclusively in Europe and the Middle East and non-exclusively in Africa and South America. We also sold our DFC components and stacks to MTU under this agreement. The Cell License Agreement expired December 14, 2009.

**Significant Customers and Backlog**

We contract with a small number of customers for the sale of our products and for research and development contracts. For the fiscal years ended October 31, 2009, 2008 and 2007, our top two customers accounted for 80 percent, 62 percent and 45 percent, respectively of our total annual consolidated revenue. Our largest strategic partner, POSCO, accounted for 64 percent, 46 percent and 13 percent of total revenues for the fiscal years ended October 31, 2009, 2008 and 2007, respectively, and at October 31, 2009 and 2008, total accounts receivable from POSCO were \$17.1 million and \$11.7 million, respectively. In addition, revenue from the U.S. Government (primarily the DOE) for funded research and development contracts accounted for 16 percent, 17 percent and 31 percent of consolidated revenue for the fiscal years ended October 31, 2009, 2008 and 2007, respectively.

There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of net revenues could continue to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of, or a reduction in sales to, one or more of our larger customers could have a material adverse affect on our business, financial condition and results of operations.

See Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8 Consolidated Financial Statements and Supplementary Data for further information regarding our revenue and revenue recognition policies.

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

Product order backlog was \$66.4 million and \$67.1 million as of October 31, 2009 and 2008, respectively, representing 43.7 MW and 32.5 MW as of October 31, 2009 and October 31, 2008, respectively. Product orders represent 24 percent of our total funded backlog as of October 31, 2009. Backlog for long-term service agreements was \$24.3 million and \$20.5 million as of October 31, 2009 and 2008, 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 \$14.2 million and \$4.8 million as of October 31, 2009 and 2008, respectively. The unfunded portion of our research and development contracts amounted to \$10.9 million and \$1.1 million as of October 31, 2009 and 2008, 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, 2009 we had contracts for power plants totaling 3 MW under PPAs ranging from five to ten years. Revenue under these agreements is recognized as electricity is produced. This revenue is not included in backlog described above.

**Employees**

As of October 31, 2009 we had 472 full-time employees, of whom 201 were located at the Torrington, Connecticut manufacturing plant, and 271 were located at the Danbury, Connecticut facility or various field offices. None of our employees are represented by labor unions or covered by a collective bargaining agreement.

**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 (SEC). 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.

The public may also read and copy any materials that we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports and other information regarding issuers that file electronically with the SEC located at <http://www.sec.gov>.

**Table of Contents****Executive Officers of the Registrant**

<b>NAME</b>	<b>AGE</b>	<b>PRINCIPAL OCCUPATION</b>
<b>R. Daniel Brdar</b> President, Chief Executive Officer and Chairman of the Board of Directors	50	Mr. Brdar has been Chairman of the Board of Directors since January 2007, Chief Executive Officer since January 2006 and President since August 2005. He joined the Company in 2000 as Executive Vice President and Chief Operating Officer. Prior to joining the Company, Mr. Brdar held management positions at General Electric Power Systems from 1997 to 2000 where he focused on new product introduction programs and was product manager for its gas turbine technology. He was Associate Director, Office of Power Systems Product Management at the U.S. Department of Energy from 1988 to 1997 where he held a variety of positions including directing the research, development and demonstration of advanced power systems including gas turbines, gasification systems and fuel cells. Mr. Brdar received a B.S. in Engineering from the University of Pittsburgh.
<b>Christopher R. Bentley</b> Executive Vice President, Government R&D Operations, Strategic Manufacturing Development	67	Mr. Bentley has been responsible for Government Research and Development Operations and Strategic Manufacturing Development since January of 2005. He joined the Company in 1990 to develop manufacturing and operations capability in support of the DFC commercialization initiative. He served on the Board of Directors from 1993 to 2004. Prior to joining the Company, he was Director of Manufacturing (1985), Vice-President and General Manager (1985-1988) and President (1989) of the Turbine Airfoils Division of Chromalloy Gas Turbine Corporation, a major manufacturer of gas turbine hardware. From 1960 to 1985 he was with the General Electric Company. Mr. Bentley received a B.S. in Mechanical Engineering from Tufts University.
<b>Joseph G. Mahler</b> Senior Vice President, Chief Financial Officer, Corporate Secretary, Treasurer, Corporate Strategy	57	Mr. Mahler joined the Company in October 1998 as Vice President, Chief Financial Officer, Corporate Secretary, and Treasurer. His responsibilities include finance, accounting, corporate governance, strategy, treasury, information systems and human resources. Prior to joining the Company, Mr. Mahler was Vice President Chief Financial Officer at Earthgro, Inc.

from 1993 to 1998 and worked at Ernst & Young in the New York and Hartford offices from 1974 to 1992. He was a partner in the Hartford office s Entrepreneurial Services Group. Mr. Mahler received a B.S. in Accounting from Boston College.

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**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 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. We have, from time to time, sought financing in the public markets in order to fund operations. Our future ability to obtain such financing, if required, could be impaired by a variety of factors, including the price of our common stock, the current global economic crisis and general market conditions.

***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 improvements (including stack life and projected power output). 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 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. Volatility of electricity prices may impact sales of our products in the markets in which we compete.***

Our DFC Power Plants operate 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 as well as local utility electricity costs. Significant decreases (or short term increases) in the price of these fuels or grid delivered prices for electricity could also have a material adverse effect on our business because other generation sources could be more economically attractive to consumers than our products.

***The reduction or elimination of government subsidies and economic incentives for alternative energy technologies, including our fuel cell power plants, could reduce demand for our products, lead to a reduction in our revenues and adversely impact our operating results.***

We believe that the near-term growth of alternative energy technologies, including our fuel cells, relies on the availability and size of government and economic incentives (including, but not limited to, the U.S. Federal ITC, the incentive programs in South Korea and the state of California and state RPS programs). Many of these government incentives expire, phase out over time, exhaust the allocated funding, or require renewal by the applicable authority. In addition, these incentive programs could be challenged by utility companies, or for other reasons found to be unconstitutional, and/or could be reduced or discontinued for other reasons. The reduction, elimination, or expiration of government subsidies and economic incentives may result in the diminished economic competitiveness of our power plants to our customers and could materially and adversely affect the growth of alternative energy technologies, including our fuel cells, as well as our future operating results.



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***Financial markets worldwide have been impacted by a credit crisis which may have a material adverse impact on our Company, our customers and our suppliers.***

Financial markets have been impacted by a credit crisis worldwide, affecting both debt and equity markets. This has substantially limited the amount of financing available to all companies, including companies with substantially greater resources, better credit ratings and more successful operating histories than ours. It is impossible to predict how long this crisis will last or how it will be resolved and it may have a materially adverse affect on us for a number of reasons, such as:

The long term nature of our sales cycle often requires long lead times between order booking and product fulfillment. For this, we often require substantial cash down payments in advance of delivery. Our growth strategy assumes that financing will be available for our customers to provide for such down payments and to pay for our products. The worldwide credit crisis may delay, cancel or restrict the construction budgets and funds available to our customers that we expect to be the ultimate purchasers of our products and services;

Projects using our products are, in part, financed by equity investors interested in tax benefits as well as by the commercial and governmental debt markets. The recent significant declines in the U.S. and international stock markets, coupled with the failure of several large financial institutions, has caused significant uncertainty and resulted in an increase in the return required by investors in relation to the risk of such projects. This in turn has increased the cost of capital to the point where new projects or projects in the early or planning stages may not receive funding or may have project delays or cancellations.

If we, or our customers and suppliers, cannot obtain financing under favorable terms during the current financial crisis or should the financial crisis worsen, our business may be negatively impacted.

***We have signed product sales contracts, long-term service agreements and power purchase agreements with customers subject to technology and operating risks as well as market conditions that may affect our operating results.***

Revenues from fuel cell product sales contracts 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. As our fuel cell products are still in their early stages of development and market acceptance, we cannot reliably estimate the total costs to produce, install and operate our newest products through the end of the warranty period included in our product sales contracts. Therefore, actual costs incurred could differ materially from those used during revenue recognition and we also have not historically provided for a loss reserve estimate on product or service contracts because such losses cannot be reasonably estimated. As our products achieve commercial market acceptance and we gain further operating experience, a reliable history of production and service costs and product life should enable management to reasonably estimate future costs to complete an individual product or service contract, and establish contract loss reserves, if necessary.

We have contracted under long-term service agreements with certain customers to provide service on our products over terms ranging from one to 13 years. Under the provisions of these contracts, we provide services to maintain, monitor, and repair customer power plants to meet minimum operating levels. 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. While we have conducted tests to determine the overall life of our products, we have not run our products over their projected useful life prior to large-scale commercialization. As a result, we cannot be sure that our products will last to their expected useful life, which could result in warranty claims and further losses on service contracts.

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Under the terms of our PPAs, 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 state's SGIP 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 extend product warranties which could affect our operating results.***

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs on products that have sufficient operating experience to allow for management to reasonably estimate warranty obligations. For newer products where we have limited operating experience, warranty costs are currently expensed as incurred. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects.

***Our products are complex and could contain defects which could reduce sales of those products or result in claims against us.***

We develop complex and evolving products. Despite testing by us, our customers and our suppliers, issues may be found in existing or new products. This could result in a delay in recognition or loss of revenues, loss of market share or failure to achieve market acceptance. The occurrence of defects could also cause us to incur significant warranty, support and repair costs, could divert the attention of our engineering personnel from our product development efforts, and could harm our relationships with our customers. The occurrence of these problems could result in the delay or loss of market acceptance of our products and would likely harm our business. Defects or performance problems with our products could result in financial or other damages to our customers. Our customers could also seek and obtain damages from us for their losses. From time to time, we have been involved in disputes regarding product warranty issues. Although we seek to limit our liability, a product liability claim brought against us, even if unsuccessful, would likely be time consuming and could be costly to defend.

***We currently face 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.

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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.; United Technologies Corp. or UTC Power; and Plug Power), phosphoric acid fuel cells (UTC Power and Samsung Everland) and solid oxide fuel cells (Siemens Westinghouse Electric Company, General Electric, Delphi, Rolls Royce, Bloom Energy, 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. Fuji Electric has been involved with both PEM and phosphoric acid fuel cells. In Korea, Doosan Corporation is engaged in carbonate fuel cell development.

Other than fuel cell developers, we must also compete with such companies as Caterpillar, Cummins, Wartsilla, MTU, Mitsubishi Heavy Industries 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. Electrical efficiency of these products can be competitive with our DFC Power Plants in certain applications. 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 a large and influential stockholder, which may make it difficult for a third party to acquire our common stock.***

POSCO currently owns approximately 13 percent of our outstanding common stock, which could make it difficult for a third party to acquire our common stock. POSCO is also a licensee of our technology and purchaser of our products. Therefore, it may be in their interests to possess substantial influence over matters concerning our overall strategy and technological and commercial development.

***MTU Onsite Energy may develop competing technologies.***

MTU Onsite Energy (formerly CFC Solutions GmbH) is currently developing carbonate fuel cell technology. If this technology does not use DFC know-how, MTU Onsite Energy must use good faith efforts to license the technology to us. If MTU Onsite Energy is successful but does not grant us a license, it may be directly competing with us. We have agreed with MTU Onsite Energy to continue developing products with as much commonality as possible. However, the license agreement between us and MTU Onsite Energy provides that each of us retains the right to independently pursue the development of carbonate fuel cell technologies.

***We have limited experience manufacturing our 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 products on a commercial basis. Our overall manufacturing process has a production capacity of 70 MW per year. We expect that we will further 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.

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***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 products.***

Our plans are dependent upon market acceptance of, as well as enhancements to, our 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 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;

customer 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 our products and may never achieve profitability.

As we continue to commercialize our products, we intend to continue to develop warranties, power 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 and financial condition.

***We are substantially dependent on a small number of customers and the loss of any one of these customers could adversely affect our business, financial condition and results of operations.***

We contract with a small number of customers for the sale of our products and for research and development contracts. For the fiscal years ended October 31, 2009, 2008 and 2007, our top two customers, POSCO and the U.S. Department of Energy and other governmental agencies, accounted for 80 percent, 62 percent and 45 percent, respectively of our total annual consolidated revenue. Our largest strategic partner, POSCO, accounted for 64 percent, 46 percent and 13 percent of total revenues, and the DOE and other governmental agencies accounted for 16 percent, 17 percent and 31 percent of total revenues for the fiscal years ended October 31, 2009, 2008 and 2007, respectively.

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There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of net revenues could continue to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of, or a reduction in sales to, one or more of our larger customers could have a material adverse affect on our business, financial condition and 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, 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 results of operations and 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. One of our patents that resulted from DOE-funded research prior to January 1988 (the date that we qualified as a small business) is owned by the U.S. government and has 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.

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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 averaged over a one year period. 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 of October 31, 2009, we had a total of 472 full-time employees; 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, and 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 our 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 affect on our stock price. To the extent we enter into distributor relationships, the failure of these distributors to assist us with the marketing and distribution of our products may adversely affect our results of operations and financial condition.

We cannot be sure that our OEMs will manufacture or package products using our Direct FuelCell components. 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 OEMs could adversely affect the market for our 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 raw materials and components for our products.***

We use various raw materials and components to construct a fuel cell module, including nickel and stainless steel which are critical to our manufacturing process. We also rely on third-party suppliers for the balance-of-plant components in our products. Suppliers must undergo a qualification process, which takes four to twelve months. We continually evaluate new suppliers and we are currently qualifying several new suppliers. There are a limited number of suppliers for some of the key components of products. A supplier's failure to develop and supply components in a timely manner, supply components that meet our quality, quantity or cost requirements, 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.

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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. As of October 31, 2009, we have 58 current U.S. patents and 74 international patents covering our fuel cell technology. These patents will expire between 2010 and 2028 and have an average remaining life of 11.2 years.

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 able to be patented, 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 be 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.

We cannot assure you that any of the U.S. or international 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 able to be patented, 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 have 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.



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While we are not currently engaged in any 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 and Chairman of the Board of Directors. 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 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 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. 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 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.

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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.

***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 use corrosive carbonate material, which could expose us to potential liability claims. Although we have comprehensive safety, maintenance, and training programs in place and follow third-party certification protocols, codes and standards, 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 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 adequate insurance coverage on acceptable terms.

***We are subject to risks inherent in international operations.***

Since we market our products both inside and outside the U.S., 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. Sales to customers located outside the U.S. accounted for 65 percent, 50 percent and 34 percent of our consolidated revenue in fiscal 2009, 2008 and 2007, respectively. Sales to customers in Asia represent the majority of our international sales. 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 results of operations and financial condition.



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***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.

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***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 stock could negatively impact FuelCell.***

The terms of the Series 1 preferred shares issued by FuelCell Energy, Ltd. ( FCE ), our wholly-owned, indirect subsidiary, provide rights to the holder, Enbridge, which could negatively impact us. 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). We have agreed to pay a minimum of Cdn.\$500,000 in cash or common stock annually to Enbridge, as long as Enbridge holds these shares. Interest accrues on cumulative unpaid dividends at an annual rate of 9 percent, compounded quarterly. All cumulative unpaid dividends must be paid by December 31, 2010. Using an exchange rate of Cdn.\$0.93 to U.S.\$1.00 (exchange rate on October 31, 2009), cumulative unpaid dividends and accrued interest on the Series 1 Preferred Shares was \$9.8 million as of October 31, 2009. Subsequent to 2010, FCE will be required to pay an annual dividend of Cdn.\$1.25 million so long as the Series 1 Preferred Shares remain outstanding. We have guaranteed FCE's dividend obligations 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 \$3.33 (our common stock closing price on October 31, 2009) and an exchange rate of Cdn.\$0.93 to U.S.\$1.00 (exchange rate on October 31, 2009) at the time of conversion, we would be required to issue approximately 7,369,000 shares of our common stock.

The terms of the Series B preferred stock also provide rights to their holders that could negatively impact us. Holders of the Series B preferred stock 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.

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***If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud, which could harm our brand and operating results.***

Effective internal controls are necessary for us to provide reliable and accurate financial reports and effectively prevent fraud. We have devoted significant resources and time to comply with the internal control over financial reporting requirements of the Sarbanes-Oxley Act of 2002. In addition, Section 404 under the Sarbanes-Oxley Act of 2002 requires that we assess, and that our auditors attest to, the design and operating effectiveness of our controls over financial reporting. Our compliance with the annual internal control report requirement for each fiscal year will depend on the effectiveness of our financial reporting and data systems and controls. Inferior internal controls could cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock and our access to capital.

***Our results of operations could vary as a result of methods, estimates and judgments we use in applying our accounting policies.***

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations (see Critical Accounting Policies and Estimates in Part II, Item 7 of our Form 10-K). Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that could lead us to reevaluate our methods, estimates and judgments.

With the introduction of our new DFC products in the third quarter of fiscal 2009, combined with cost reductions, we expect the power plant sales to be gross margin positive on a unit by unit basis although we have limited operating experience with these products. As we gain experience in future periods, management may reevaluate its accounting methodologies for recognizing revenue and its estimates for contract losses and inventory reserves. Changes in those methods, estimates and judgments could significantly affect our results of operations and financial condition. We may also adopt changes required by the Financial Accounting Standards Board and the Securities and Exchange Commission.

**Table of Contents****Item 1B. UNRESOLVED STAFF COMMENTS**

As of January 14, 2010, we had unresolved comments from the SEC Staff related to our request for confidential treatment of certain information included within customer agreements filed as exhibits to a Form 8-K and Form 10-Q. The Staff's comments would not have any impact on amounts presented within our consolidated financial statements or the notes to consolidated financial statements.

**Item 2. PROPERTIES**

The following is a summary of our offices and locations:

<b>Location</b>	<b>Business Use</b>	<b>Square Footage</b>	<b>Lease Expiration Dates</b>
Danbury, Connecticut	Corporation Headquarters, Research and Development, Sales, Marketing, Purchasing and Administration	72,000	Company owned
Torrington, Connecticut	Manufacturing	65,000	December 2015
Danbury, Connecticut	Manufacturing and Operations	38,000	October 2014

**Item 3. LEGAL PROCEEDINGS**

None.

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

None.

**Table of Contents****PART II****Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS  
AND ISSUER PURCHASES OF EQUITY SECURITIES****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 trades under the symbol FCEL on the Nasdaq Global Market. 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 Global Market during the indicated quarters.

	<b>Common Stock Price</b>	
	<b>High</b>	<b>Low</b>
<b><i>Year Ended October 31, 2009</i></b>		
First Quarter	\$ 5.48	\$ 2.25
Second Quarter	\$ 4.06	\$ 1.98
Third Quarter	\$ 5.47	\$ 2.76
Fourth Quarter	\$ 4.61	\$ 3.27
<b><i>Year Ended October 31, 2008</i></b>		
First Quarter	\$ 13.14	\$ 7.08
Second Quarter	\$ 9.24	\$ 5.43
Third Quarter	\$ 10.30	\$ 6.50
Fourth Quarter	\$ 8.83	\$ 3.10

On January 5, 2010, the closing price of our common stock on the Nasdaq Global Market was \$3.93 per share. As of January 5, 2010, there were 686 holders of record of our common stock. This does not include the number of persons whose stock is in nominee or street name accounts through brokers.

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.



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**Performance Graph**

The following graph compares the annual change in the Company's cumulative total stockholder return on its Common Stock for the five fiscal years ended October 31, 2009 with the cumulative stockholder total return on the Russell 2000 Index and a peer group consisting of Standard Industry Classification ( SIC ) Group Code 369 companies listed on The American Stock Exchange, Nasdaq Global Market and New York Stock Exchange for that period ( Peer Index ). It assumes \$100 invested on November 1, 2004 with dividends reinvested.

**Series 1 Preferred Shares**

We have 1,000,000 Series 1 Class A Cumulative Redeemable Exchangeable Preferred Shares ( Series 1 Preferred Shares ) issued and outstanding. The Series 1 Preferred Shares were issued by FuelCell Energy, Ltd. ( FCE ), one of our wholly-owned subsidiaries. We have guaranteed the obligations of FCE under the Series 1 Preferred Shares.

A holder of Series 1 Preferred Shares has the right to convert such shares into fully paid and non-assessable common stock of the Company 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, at a price equal to 95 percent of the then current market price (in Cdn.\$) 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.

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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 (the amount currently outstanding) and assume that all accrued dividends 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.\$0.93 to U.S.\$1.00 (exchange rate on October 31, 2009) at the time of the conversion:

if conversion occurs prior to July 31, 2010, we would be required to issue 207,952 shares of our common stock;

if conversion occurs after July 31, 2010, but prior to July 31, 2015, we would be required to issue 193,110 shares of our common stock;

if conversion occurs after July 31, 2015, but prior to July 31, 2020, we would be required to issue 180,232 shares of our common stock; and

if conversion occurs any time after July 31, 2020, assuming our common stock price is U.S. \$3.33 (our common stock closing price on October 31, 2009) at the time of conversion, we would be required to issue 7,369,116 shares of our 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). We have agreed to pay a minimum of Cdn.\$500,000 in cash or common stock annually to Enbridge Inc. ( Enbridge ), the sole holder of the Series 1 Preferred Shares, as long as Enbridge holds these shares. Interest accrues on cumulative unpaid dividends at an annual rate of 9 percent, compounded quarterly. All cumulative unpaid dividends must be paid by December 31, 2010. Using an exchange rate of Cdn.\$0.93 to U.S.\$1.00 (exchange rate on October 31, 2009), cumulative unpaid dividends and accrued interest on the Series 1 Preferred Shares was \$9.8 million as of October 31, 2009. Subsequent to 2010, FCE will be required to pay annual dividend amounts totaling Cdn.\$1.25 million so long as the Series 1 Preferred Shares remain outstanding.

FCE may redeem in whole or in part the Series 1 Preferred Shares if the trading price of our common stock for a calculated period is not less than 120 percent of the current conversion price plus all accrued and unpaid dividends. On and after July 31, 2010, the Series 1 Preferred Shares are redeemable by FCE for Cdn.\$25 per share plus all unpaid dividends and accrued interest. Holders of the Series 1 Preferred Shares do not have any mandatory or conditional redemption rights.

In the event of the liquidation or dissolution of FCE, the holders of Series 1 Preferred Shares will be entitled to receive Cdn.\$25 per share plus all unpaid dividends and accrued interest before any amount will be paid or any of FCE's property or assets will be distributed to the holders of FCE's common stock. After payment to the holders of the Series 1 Preferred Shares of the amounts payable to them, the holders of the Series 1 Preferred Shares will not be entitled to any other distribution of FCE's property or assets.

**Series B Preferred Shares**

We have 250,000 shares of our 5 percent Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000) ( Series B Preferred Stock ) authorized for issuance. At October 31, 2009 and 2008, there were 64,120 shares of Series B Preferred Stock issued and outstanding. The shares of our Series B Preferred Stock and 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. The following is a summary of certain provisions of our Series B Preferred Stock.

*Ranking*

Shares of 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.

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*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. Unpaid accumulated dividends do not bear interest.

The dividend rate is subject to upward adjustment as set forth in the Certificate of Designation if we fail to pay, or to set apart funds to pay, any quarterly dividend. The dividend rate 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 Stock (or the underlying common shares) under the Registration Rights Agreement.

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

The dividend on the Series B Preferred Stock may be paid 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. Dividends of \$3.2 million were paid in each of the years ended October 31, 2009 and 2008. There were no cumulative unpaid dividends at October 31, 2009.

*Liquidation*

The Series B Preferred Stock stockholders are entitled to receive, in the event that we are liquidated, dissolved or wound up, whether voluntary or involuntary, \$1,000 per share plus all accumulated and unpaid dividends to the date of that liquidation, dissolution, or winding up ( Liquidation Preference ). Until the holders of Series B Preferred Stock receive their Liquidation Preference in full, no payment will be made on any junior shares, including shares of our common stock. After the Liquidation Preference is paid in full, holders of the Series B Preferred Stock will not be entitled to receive any further distribution of our assets. At October 31, 2009 and 2008, the Series B Preferred Stock had a Liquidation Preference of \$64.1 million.

*Conversion Rights*

Each Series B Preferred Stock share 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 in the Certificate of Designation, but will not be adjusted for accumulated and unpaid dividends. If converted, holders of Series B Preferred Stock do not receive a cash payment for all accumulated and unpaid dividends; rather, all accumulated and unpaid dividends are cancelled.

On or after November 20, 2009 we may, at our option, cause shares of 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 percent of the then prevailing conversion price (\$11.75 at November 20, 2009) for 20 trading days during any consecutive 30 trading day period, as described in the Certificate of Designation.

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*Redemption*

We do not have the option to redeem the shares of Series B Preferred Stock. However, holders of the Series B Preferred Stock can require us to redeem all or part of their shares at a redemption price equal to the Liquidation Preference of the shares to be redeemed in the case of a fundamental change (as described in the Certificate of Designation).

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 percent 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.

*Voting Rights*

Holders of Series B Preferred Stock currently have no voting rights; however, holders may receive certain voting rights, as described in the Certificate of Designation, if (1) dividends on any shares of Series B Preferred Stock, or any other class or series of stock ranking on a parity with the Series B Preferred Stock with respect to the payment of dividends, shall be in arrears for dividend periods, whether or not consecutive, for six calendar quarters or (2) we fail to pay the redemption price, plus accrued and unpaid dividends, if any, on the redemption date for shares of Series B Preferred Stock following a fundamental change.

So long as any shares of Series B Preferred Stock remain outstanding, we will not, without the consent of the holders of at least two-thirds of the shares of 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 the 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 the 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 Series B Preferred Stock or the holders thereof without the affirmative vote of not less than two-thirds of the issued and outstanding Series B Preferred Stock shares.

**Equity Compensation Plan Information**

See Part III, Item 12 for information regarding securities authorized for issuance under our equity compensation plans.

**Table of Contents****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, 2009 have been derived from our audited consolidated financial statements together with the notes thereto included elsewhere in this annual report on Form 10-K. The data set forth below is qualified by reference to, and should be read in conjunction with our consolidated financial statements and their notes and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this annual report on Form 10-K.

**Consolidated Statement of Operations Data:**

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

	<b>Years Ended October 31,</b>				
	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>
<b>Revenues:</b>					
Product sales and revenue	\$ 73,804	\$ 82,748	\$ 32,517	\$ 21,514	\$ 17,398
Research and development contracts	14,212	17,987	15,717	11,774	12,972
<b>Total revenues</b>	<b>88,016</b>	<b>100,735</b>	<b>48,234</b>	<b>33,288</b>	<b>30,370</b>
<b>Costs and expenses:</b>					
Cost of product sales and revenues	107,033	134,038	61,827	61,526	52,067
Cost of research and development contracts	10,994	16,059	13,438	10,330	13,183
Administrative and selling expenses	17,194	19,968	18,625	17,759	14,154
Research and development expenses	19,160	23,471	27,489	24,714	21,840
<b>Total costs and expenses</b>	<b>154,381</b>	<b>193,536</b>	<b>121,379</b>	<b>114,329</b>	<b>101,244</b>
<b>Loss from operations</b>	<b>(66,365)</b>	<b>(92,801)</b>	<b>(73,145)</b>	<b>(81,041)</b>	<b>(70,874)</b>
Interest expense	(265)	(100)	(84)	(103)	(103)
Loss from equity investments	(812)	(1,867)	(1,263)	(828)	(1,553)
Interest and other income, net <sup>(1)</sup>	860	3,268	7,471	5,760	5,596
Redeemable minority interest	(2,092)	(1,857)	(1,653)	107	
Provision for taxes					
<b>Loss from continuing operations</b>	<b>(68,674)</b>	<b>(93,357)</b>	<b>(68,674)</b>	<b>(76,105)</b>	<b>(66,934)</b>
Discontinued operations, net of tax					(1,252)
<b>Net loss</b>	<b>(68,674)</b>	<b>(93,357)</b>	<b>(68,674)</b>	<b>(76,105)</b>	<b>(68,186)</b>
Preferred stock dividends	(3,208)	(3,208)	(3,208)	(8,117)	(6,077)
<b>Net loss to common shareholders</b>	<b>\$ (71,882)</b>	<b>\$ (96,565)</b>	<b>\$ (71,882)</b>	<b>\$ (84,222)</b>	<b>\$ (74,263)</b>
<b>Basic and diluted loss per share:</b>					
Continuing operations	\$ (0.99)	\$ (1.41)	\$ (1.16)	\$ (1.65)	\$ (1.51)
Discontinued operations					(.03)
<b>Net loss to common shareholders</b>	<b>\$ (0.99)</b>	<b>\$ (1.41)</b>	<b>\$ (1.16)</b>	<b>\$ (1.65)</b>	<b>\$ (1.54)</b>

Basic and diluted weighted average shares outstanding	72,393	68,571	61,991	51,047	48,261
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(1) Includes net license fee income of \$34, \$42, \$70 and \$19 for years ended October 31, 2008, 2007, 2006 and 2005, respectively that were reported separately in prior years.

**Table of Contents****Consolidated Balance Sheet Data:**

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

	As of October 31,				
	2009	2008	2007	2006	2005
Cash and cash equivalents	\$ 57,823	\$ 38,043	\$ 92,997	\$ 26,247	\$ 22,702
Short-term investments (U.S. treasury securities)	7,004	30,406	60,634	81,286	113,330
Working capital	77,793	59,606	158,687	104,307	140,736
Total current assets	119,679	118,020	201,005	133,709	161,894
Long-term investments (U.S. treasury securities)		18,434		13,054	43,928
Total assets	162,688	185,476	253,188	206,652	265,520
Total current liabilities	41,886	58,414	42,318	29,402	21,158
Total non-current liabilities	14,534	6,747	5,014	5,840	2,892
Redeemable minority interest	14,976	13,307	11,884	10,665	11,517
Redeemable preferred stock	59,950	59,950	59,950	59,950	98,989
Total shareholders equity	31,342	47,058	134,022	100,795	130,964
Book value per share <sup>(1)</sup>	\$ 0.37	\$ 0.68	\$ 1.97	\$ 1.90	\$ 2.70

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

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

The following discussion should be read in conjunction with information included in Item 8 of this report. Unless otherwise indicated, the terms Company, FuelCell Energy, we, us, and our refer to FuelCell Energy Inc. and its subsidiaries. All tabular dollar amounts are in thousands.

In addition to historical information, this discussion and analysis contains 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, the risk that commercial field trials of our products will not occur when anticipated, general risks associated with product development and manufacturing, changes in the utility regulatory environment, potential volatility of energy prices, rapid technological change, competition, market acceptance of our products and our ability to achieve our sales plans and cost reduction targets, as well as other risks set forth in our filings with the Securities and Exchange Commission including those set forth under Item 1A Risk Factors in this report.

**Overview and Recent Developments**

*Overview*

We are a world leader in the development and production of stationary fuel cells for commercial, industrial, government and utility customers. Our ultra-clean and high efficiency Direct FuelCell® power plants are generating power at over 55 locations worldwide. Our products have generated over 400 million kWh of power using a variety of fuels including renewable wastewater gas, food and beverage waste, natural gas and other hydrocarbon fuels.

Our core fuel cell products ( Direct FuelCell or DFC Power Plants ) offer higher-efficiency stationary power generation for customers. In addition to our commercial products, we continue to develop our carbonate fuel cells, planar solid oxide fuel cell ( SOFC ) technology and other fuel cell technology with our own and government research and development funds.

Our proprietary carbonate DFC Power Plants electrochemically (without combustion) produce electricity directly from readily available hydrocarbon fuels such as natural gas and biogas. Customers buy fuel cells to reduce cost and pollution, and improve power reliability. Electric generation without combustion significantly reduces harmful pollutants such as NOX and particulates. Higher fuel efficiency results in lower emissions of carbon dioxide ( CO<sub>2</sub> ), a major greenhouse gas, and also results in less fuel needed per kWh of electricity generated and Btu of heat produced. Greater efficiency reduces customers' exposure to volatile fuel costs and minimizes operating costs. Our fuel cells operate 24/7 providing reliable power to both on-site customers and for grid-support applications.

Compared to other power generation technologies, our products offer significant advantages including:

- Near-zero toxic emissions;
- High fuel efficiency;
- Ability to site units locally as distributed power generation;
- Potentially lower cost power generation;
- Byproduct heat ideal for cogeneration applications;
- Reliable 24/7 base load power;
- Quiet operation; and
- Fuel flexibility.



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Typical customers for our products include manufacturers, mission critical institutions such as correction facilities and government installations, hotels, natural gas letdown stations and customers who can use renewable gas for fuel such as breweries, food processors, and wastewater treatment facilities. Our MW-class products are also used to supplement the grid for utility customers. With increasing demand for renewable and ultra-clean power options and increased volatility in electric markets, our customers gain control of power generation economics, reliability, and emissions.

We have 58 current U.S. patents (including one granted in December 2009 by the U.S. Patent and Trademark Office for which issue is pending) and 74 international patents covering our fuel cell technology (in certain cases covering the same technology in multiple jurisdictions). We also currently have 38 U.S. and 154 international patents under application.

***Recent Developments***

***POSCO Power***

On October 27, 2009, we entered into a Stack Technology Transfer and License Agreement (the 2009 License Agreement ) with POSCO Power ( POSCO ) allowing POSCO to produce fuel cell stack modules from cells and components provided by us. These fuel cell modules will be combined with balance of plant manufactured and locally sourced in South Korea to complete electricity-producing fuel cell power plants for sale in South Korea. The 2009 License Agreement provides for an upfront license fee of \$10.0 million as well as an ongoing royalty, initially set at 4.1 percent of the revenues generated by sales of the fuel cell stack modules manufactured and sourced by POSCO.

Additionally on October 27, 2009, POSCO purchased \$25.0 million (6,963,788 shares) of our common stock. With this investment, POSCO's ownership interest in our common stock increased to approximately 13 percent based on total common stock outstanding as of October 31, 2009.

In June 2009, we entered into a Product Sales Contract with POSCO for a total of 30.8 MW of FuelCell Energy DFC modules and components. The order represents an estimated sales value of \$58 million and calls for delivery of units during 2010 and early 2011. We received an advance payment of \$5.8 million in July 2009.

***Registered Direct Offering***

In June 2009, we raised \$22.5 million, net of fees and expenses, from a registered direct offering of 6,737,166 shares of common stock at \$3.59 per share.

***Connecticut Renewable Portfolio Standards Program***

Under Connecticut's Renewable Portfolio Standards ( RPS ) program, the Connecticut Department of Public Utility Control ( DPUC ) issued a final decision approving 27.3 MW in April 2009, bringing the total projects incorporating our power plants awarded to 43.5 MW. These include a 14.3 MW power plant for grid support, 18.8 MW of DFC-ERG<sup>®</sup> power plants to be located at four natural gas distribution stations, a 3.2 MW DFC/Turbine for an electrical substation, and 7.2 MW at two hospitals. The DFC-ERG and DFC/Turbine power plants are our highest-efficiency products and are twice as efficient as the average U.S. central generation fossil fuel power plant. These projects are eligible for the \$6 billion federal loan guarantee program and the federal Investment Tax Credit ( ITC ) of 30 percent of project costs up to \$3,000 per kilowatt.

***Cash Management Plan***

The pressure on credit markets and timing of federal energy policy initiatives created delays in order flow in the U.S. market, impacting our growth plans. In response, we partially offset higher cash use with lower capital spending and other company-wide cost reductions. In February 2009, we reduced our workforce by six percent, suspended employer contributions to the 401(k) plan, and froze salaries except for production employees.

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*The American Recovery and Reinvestment Act*

The American Recovery and Reinvestment Act (ARRA) enacted in February 2009 directs more than \$43 billion dollars for energy initiatives and another \$20 billion in tax incentives for renewable energy and energy efficiency over the next 10 years. Projects using our stationary fuel cells may be eligible to receive benefits under the following provisions of the ARRA:

A new federal ITC grant provision allows project developers to fund projects by applying for a grant through the Department of the Treasury. Previously, the ITC could only be used as a credit against taxable income; The ARRA repeals certain ITC limitations and now allows the credit to be taken on a greater percentage of total project costs;

For certain projects put in service during 2009, developers can claim accelerated depreciation up to 50 percent of the adjusted cost basis of the property. For projects beginning operation before January 1, 2011, developers can claim the same accelerated depreciation benefits on the adjusted basis of the project as of January 1, 2010. For developers using the ITC or cash grant, 42.5 percent can be deducted immediately;

An additional \$3.2 billion was allocated for the U.S. Department of Energy's (DOE) Energy Efficiency and Renewable Energy program to apply to state block grants. These funds are for clean energy programs and include installation of high efficiency fuel cell power plants to provide ultra-clean, reliable electricity; \$300 million was directed to the U.S. Department of Defense (DOD) for research, development, evaluation, and demonstration of projects that employ fuel cell, solar, and wind sources for energy generation;

A \$1.6 billion bond program was included that provides new clean energy bonds to finance facilities that generate electricity from ultra-clean sources such as fuel cells.

**Critical Accounting Policies and Estimates**

We prepare our financial statements in conformity with accounting principles generally accepted in the United States. The preparation of financial statements in conformity with GAAP requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. The company's critical accounting policies are those that are both most important to our financial condition and results of operations and require the most difficult, subjective or complex judgments on the part of management in their application, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Because of the uncertainty of factors surrounding the estimates or judgments used in the preparation of the consolidated financial statements, actual results may vary from these estimates.

We believe that the following discussion represents our critical accounting policies and estimates.

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*Revenue Recognition*

We earn revenue from (i) the sale and installation of fuel cell power plants and component parts to customers (i.e. product sales), (ii) providing services under long-term service contracts, (iii) the sale of electricity under power purchase agreements ( PPA ), (iv) incentive revenue from the sale of electricity under PPAs, (v) site engineering and construction services and (vi) customer-sponsored research and development projects. Our revenue is primarily generated from customers located throughout the U.S., Asia and Europe and from agencies of the U.S. government. Revenue from customer-sponsored research and development projects is recorded as research and development contracts revenue and all other revenues are recorded as product sales and revenues in the consolidated statements of operations. Revenues from fuel cell product 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 term of 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 term of the contract. Revenues from the sale of electricity are recognized as electricity is provided to the customer. Incentive revenue is recognized ratably over the term of the PPA. Site engineering and construction services revenue is recognized as costs are incurred.

As our fuel cell products are in their early stages of development and market acceptance, we cannot reliably estimate the total costs to produce, install and operate our newest products through the end of the warranty period included in our product sales contracts. Therefore, actual costs incurred could differ materially from initial estimates and materially impact revenue recognition. We also have not historically provided for a loss reserve estimate on product or service contracts because such losses cannot be reasonably estimated. As our products achieve commercial market acceptance and we gain further operating experience, a reliable history of production and service costs and product life should enable management to reasonably estimate future costs to complete an individual product or service contract, and establish contract loss reserves, if necessary.

Revenues from 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, 2009, research and development sales backlog totaled \$14.2 million, of which 24 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.

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*Inventories and Advance Payments to Vendors*

Inventories consist principally of raw materials and work-in-process and are stated at the lower of cost or market. In certain circumstances, we will make advance payments to vendors for future inventory deliveries. These advance payments are recorded as other current assets on the consolidated balance sheets.

As we have historically sold products at or below cost, we provide for a lower of cost or market ( LCM ) adjustment to the cost basis of inventory. This adjustment is computed by comparing the current sales prices of our power plants to estimated costs of completed power plants. As we gain further operating experience, management may reevaluate its accounting estimates for inventory reserves in future periods, if necessary.

As of October 31, 2009 and October 31, 2008, the LCM adjustment to the cost basis of inventory and advance payments to vendors was \$9.5 million and \$12.4 million, respectively, which equates to a reduction of 25 and 30 percent, respectively, of the gross inventory and advance payments to vendors value.

*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 in our consolidated statements of operations.

*Service and Warranty Expense Recognition*

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs on products that have sufficient operating experience to allow management to reasonably estimate warranty obligations. For newer products where we have limited operating experience, warranty costs are currently expensed as incurred. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects.

In addition to the standard product warranty of one year, we have contracted with certain customers to provide long-term service agreements ( LTSA ) for fuel cell power plants ranging from one to 13 years. Our standard service agreement term is five years. We provide for a reserve of LTSA costs if agreements are sold below our standard pricing. Pricing for LTSAs is based upon estimates of future costs, which given our products early stage of development could be materially different from actual expenses.

*Share-Based Compensation*

We account for stock options awarded to employees and non-employee directors under the fair value method of accounting using the Black-Scholes valuation model to estimate fair value at the grant date. The model requires us to make estimates and assumptions regarding the expected life of the option, the risk-free interest rate, the expected volatility of our common stock price and the expected dividend yield. The fair value of stock options is amortized to expense over the vesting period, generally four years. Share-based compensation was \$4.8 million, \$5.5 million and \$5.2 million for the fiscal years ended October 31, 2009, 2008 and 2007, respectively.

*Income Taxes*

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are determined based on net operating loss ( NOL ) carryforwards, research and development credit carryforwards, and differences between financial reporting and income tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws expected to be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded against deferred tax assets if it is unlikely that some or all of the deferred tax assets will be realized.

As of November 1, 2007, we adopted guidance for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not file a return in a particular jurisdiction). The company's financial statements should reflect expected future tax consequences of such positions presuming the taxing authorities' full knowledge of the position and all relevant facts.

The evaluation of a tax position is a two-step process. The first step is recognition: the company determines whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The second step is measurement: a tax

position that meets the more likely than not recognition threshold is measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement.

**Table of Contents****Results of Operations**

Management evaluates the results of operations and cash flows using a variety of key performance indicators including 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, 2009 and October 31, 2008****Revenues and Costs of revenues**

Our revenue and cost of revenues for the years ended October 31, 2009 and 2008 were as follows:

	<b>Year Ended October 31, 2009</b>		<b>Year Ended October 31, 2008</b>		<b>Percentage Change in Revenues</b>
	<b>Revenues</b>	<b>Percent of Revenues</b>	<b>Revenues</b>	<b>Percent of Revenues</b>	
<b>Revenues:</b>					
Product sales and revenues	\$ 73,804	84%	\$ 82,748	82%	(11)%
Research and development contracts	14,212	16%	17,987	18%	(21)%
<b>Total</b>	<b>\$ 88,016</b>	<b>100%</b>	<b>\$ 100,735</b>	<b>100%</b>	<b>(13)%</b>

	<b>Year Ended October 31, 2009</b>		<b>Year Ended October 31, 2008</b>		<b>Percentage Change in Cost of Revenues</b>
	<b>Costs of Revenues</b>	<b>Percent of Costs of Revenues</b>	<b>Cost of Revenues</b>	<b>Percent of Costs of Revenues</b>	
<b>Costs of revenues:</b>					
Product sales and revenues	\$ 107,033	91%	\$ 134,038	89%	(20)%
Research and development contracts	10,994	9%	16,059	11%	(31)%
<b>Total</b>	<b>\$ 118,027</b>	<b>100%</b>	<b>\$ 150,097</b>	<b>100%</b>	<b>(21)%</b>

Total revenues for the year ended October 31, 2009 decreased by \$12.7 million, or 13 percent, to \$88.0 million from \$100.7 million during the same period last year. Total cost of revenues for the year ended October 31, 2009 decreased by \$32.1 million, or 21 percent, to \$118.0 million from \$150.1 million during the same period last year.

We contract with a small number of customers for the sale of our products and for research and development contracts. For the fiscal years ended October 31, 2009, 2008 and 2007, our top two customers, POSCO and the DOE, accounted for 80 percent, 62 percent and 45 percent, respectively of our total annual consolidated revenue. Our largest strategic partner, POSCO, accounted for 64 percent, 46 percent and 13 percent of total revenues, and the DOE and other governmental agencies accounted for 16 percent, 17 percent and 31 percent of total revenues for the fiscal years ended October 31, 2009, 2008 and 2007, respectively.

There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of net revenues could continue to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of, or a reduction in sales to, one or more of our larger customers could have a material adverse affect on our business, financial condition and results of operations.



**Table of Contents***Product sales and revenues*

We have historically sold our fuel cell products below cost while the market develops and product costs are reduced. We have been engaged in a formal commercial cost-out program since 2003 to reduce the total life cycle costs of our power plants and have made significant progress primarily through value engineering our products, manufacturing process improvements, higher production levels, technology improvements and global sourcing. During fiscal 2009, we began production of our newest MW-class power plants. The new design incorporates new stacks with outputs of 350 kW each compared to 300 kW previously, along with lower component and raw material costs derived from process improvements, volume manufacturing and global sourcing. We expect these new products will result in gross margin improvement on a unit by unit basis.

We currently anticipate that total product sales and revenues will be gross margin profitable when we achieve annual production volumes in the 35 to 70 MW range depending on product mix. As a measure of cost reduction progress prior to achieving positive margins, we calculate a cost-to-revenue ratio, which is cost divided by revenue. Actual production in fiscal 2009 was approximately 30 MW of fuel cell products compared to approximately 22 MW in 2008.

Product sales and revenues, corresponding cost of product sales and revenues and the cost-to-revenue ratio for the fiscal years ended October 31, 2009 and 2008 were as follows:

	<b>Year Ended October 31, 2009</b>	<b>Year Ended October 31, 2008</b>	<b>Percentage Change</b>
Product sales and revenues	\$ 73,804	\$ 82,748	(11)%
Cost of product sales and revenues	107,033	134,038	(20)%
Gross margin	\$ (33,229)	\$ (51,290)	(35)%

Cost-to-revenue ratio	1.45	1.62	(10)%
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Product sales and revenues decreased \$8.9 million to \$73.8 million for fiscal 2009, compared to \$82.7 million for fiscal 2008. Reduced site engineering and construction work of \$6.7 million and lower component sales of \$1.5 million drove the decrease. Revenue in fiscal 2009 included \$63.2 million of power plant sales compared to \$64.3 million last year, \$2.0 million related to site engineering and construction work for projects where we are responsible for complete power plant system installation compared to \$8.7 million last year, \$6.0 million related to service agreements and component sales compared to \$6.8 million last year and \$2.6 million of revenue related to PPAs compared to \$2.9 million last year.

Cost of product sales and revenues decreased to \$107.0 million for fiscal 2009, compared to \$134.0 million during 2008. The cost-to-revenue ratio also decreased to 1.45-to-1 during fiscal 2009, compared to 1.62-to-1 during the same period a year ago. The cost-to-revenue ratio was favorably impacted in fiscal 2009 by the shift to lower cost MW-class products and lower unit costs across all product lines. In the second half of the fiscal year we experienced delays in commissioning and final acceptance testing on the first multi-MW products installed in South Korea. This resulted in higher costs which negatively impacted the cost-to-revenue ratio.

Cost of product sales and revenues includes costs to manufacture and ship our power plants and power plant components to customers, site engineering and construction costs where we are responsible for power plant system installation, warranty expense, liquidated damages and costs to service power plants for customers with long-term service agreements (including maintenance and stack replacement costs incurred during the period), PPA operating costs and LCM adjustments.

Service agreements and aftermarket costs, net of revenues, totaled \$14.4 million for the fiscal year ended October 31, 2009 compared to \$19.9 million in the same period of the prior year. The decrease in net service agreement and aftermarket costs is primarily due to lower stack replacement costs. In fiscal year 2008, we began producing a five-year fuel cell stack and are now using these stacks in our current power plants.





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Our standard LTSA has a term of five years and costs and margin were negatively impacted by replacement of our last generation three-year stack within the standard five-year term. Under the terms of our LTSA, the power plant must meet a minimum operating output during the term. If minimum output falls below the contract requirement, we may replace the customer's fuel cell stack with a new or used unit. Our contractual liability under LTSAs is limited to the amount of service fees payable under the contract. This can often times be less than the cost of a new stack replacement. However, in order to continue to meet customer expectations on early product designs, we incur costs in excess of our contractual liabilities. Excluding this impact, the cost-to-revenue ratio would have been 1.28-to-1 during fiscal 2009, compared to 1.40-to-1 during fiscal 2008.

LTSAs for power plants that have our new five-year stack design are not expected to require a stack change to continue to meet minimum operating levels during the initial five-year term of the contract, although we have limited operating experience with these products. Stack replacements for these agreements are expected to only be required upon renewal of the service agreement. We expect the replacement of older stacks will continue over the next several years, and as a result, we expect to continue to incur losses in order to maintain power plants. Future costs for maintaining legacy service agreements will be determined by a number of factors including life of the stack, used replacement stacks available, our limit of liability on service agreements and future operating plans for the power plant.

**Research and development contracts**

Research and development contracts revenue is derived primarily (greater than 90 percent) from the DOE and other governmental agencies. Research and development contracts revenue and related costs for the fiscal years ended October 31, 2009 and 2008 were as follows:

	<b>Year Ended October 31, 2009</b>	<b>Year Ended October 31, 2008</b>	<b>Percentage Change</b>
Research and development contracts	\$ 14,212	\$ 17,987	(21)%
Cost of research and development contracts	10,994	16,059	(32)%
Gross margin	\$ 3,218	\$ 1,928	67%

Research and development contracts revenue decreased \$3.8 million to \$14.2 million for fiscal 2009, compared to \$18.0 million for 2008. Cost of research and development contracts decreased \$5.1 million to \$11.0 million during fiscal 2009, compared to \$16.1 million for 2008. Margin from research and development contracts for 2009 was \$3.2 million or 23 percent, compared to \$1.9 million or 11 percent in 2008. The decline in revenue compared to the prior year is due to the completion of several government programs in the second half of fiscal 2008 and the transition to the Phase II coal-based SOFC contract that was awarded in January 2009. Phase II of the MW-class coal-based SOFC contract is a \$30.2 million contract of which the DOE has agreed to fund \$21.0 million with the remaining amount to be funded by us. The decline in costs and corresponding margin improvement is due to a lower cost-share requirement for the Phase II coal-based SOFC contract.

**Administrative and selling expenses**

Administrative and selling expenses decreased \$2.8 million to \$17.2 million during fiscal 2009, compared to \$20.0 million in 2008. This decrease is due to lower spending as a result of the cash management plan implemented in fiscal 2009 and lower share-based compensation expense.

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**Research and development expenses**

Research and development expenses decreased \$4.3 million to \$19.2 million during fiscal 2009, compared to \$23.5 million in 2008. The decrease is related to the cash management plan implemented in fiscal 2009 and the lower level of engineering effort supporting manufacturing operations, which is accounted for in cost of goods sold.

**Loss from operations**

Loss from operations for the fiscal year ended October 31, 2009 was \$66.4 million compared to a loss of \$92.8 million in 2008. The reduction is due to a shift of production to lower cost MW-class products, improved sales margins from cost reductions across all product lines and lower operating expenses for the reasons noted above.

**Loss from equity investments**

Our ownership interest in Versa Power Systems, Inc. ( Versa ) at October 31, 2009 was 39 percent, unchanged from 2008. We account for the investment under the equity method of accounting. Our share of equity losses from Versa decreased \$1.1 million to \$0.8 million in fiscal 2009 compared to \$1.9 million in 2008. This decrease was due to lower cost share requirements on research and development activity being performed by Versa.

**Interest and other income, net**

Interest and other income, net, decreased to \$0.9 million for fiscal 2009 compared to \$3.3 million for 2008 due to lower average invested balances and average interest rates.

**Provision for income taxes**

We have not paid federal or state income taxes in several years due to our history of net operating losses. During 2009, we began manufacturing products that are expected to be gross margin profitable on a per unit basis; however, we cannot estimate when production volumes will be sufficient to generate taxable income. Accordingly, no tax benefit has been recognized related to current or prior year losses and other deferred tax assets as significant uncertainty exists surrounding the recoverability of these deferred tax assets. Approximately \$4.3 million of our valuation allowance would reduce additional paid in capital upon subsequent recognition of any related tax benefits.

As of October 31, 2009, we have \$497 million of federal NOL carryforwards that expire in the years 2020 through 2029 and \$341 million in state NOL carryforwards that expire in the years 2011 through 2029. We also have \$8.1 million of Connecticut state tax credit carryforwards, of which \$1 million expires in 2018. The remaining credits do not expire.

**Table of Contents****Comparison of the Years Ended October 31, 2008 and October 31, 2007****Revenues and Costs of revenues**

Our revenue and cost of revenues for the years ended October 31, 2008 and 2007 were as follows:

	<b>Year Ended October 31, 2008</b>		<b>Year Ended October 31, 2007</b>		<b>Percentage Change in Revenues</b>
	<b>Revenues</b>	<b>Percent of Revenues</b>	<b>Revenues</b>	<b>Percent of Revenues</b>	
<b>Revenues:</b>					
Product sales and revenues	\$ 82,748	82%	\$ 32,517	67%	154%
Research and development contracts	17,987	18%	15,717	33%	14%
<b>Total</b>	<b>\$ 100,735</b>	<b>100%</b>	<b>\$ 48,234</b>	<b>100%</b>	<b>109%</b>

	<b>Year Ended October 31, 2008</b>		<b>Year Ended October 31, 2007</b>		<b>Percentage Change in Cost of Revenues</b>
	<b>Costs of Revenues</b>	<b>Percent of Costs of Revenues</b>	<b>Cost of Revenues</b>	<b>Percent of Costs of Revenues</b>	
<b>Costs of revenues:</b>					
Product sales and revenues	\$ 134,038	89%	\$ 61,827	82%	117%
Research and development contracts	16,059	11%	13,438	18%	20%
<b>Total</b>	<b>\$ 150,097</b>	<b>100%</b>	<b>\$ 75,265</b>	<b>100%</b>	<b>99%</b>

Total revenues for the year ended October 31, 2008 increased by \$52.5 million, or 109 percent, to \$100.7 million from \$48.2 million during the same period last year. Components of revenues and costs of revenues are as follows:

*Product sales and revenues*

Product sales and revenues, corresponding cost of product sales and revenues and the cost-to-revenue ratio for the fiscal years ended October 31, 2008 and 2007 were as follows:

	<b>Year Ended October 31, 2008</b>	<b>Year Ended October 31, 2007</b>	<b>Percentage Change</b>
Product sales and revenues	\$ 82,748	\$ 32,517	154%
Cost of product sales and revenues	134,038	61,827	117%
<b>Gross margin</b>	<b>\$ (51,290)</b>	<b>\$ (29,310)</b>	<b>75%</b>

Cost-to-revenue ratio 1.62 1.90 (15%)

Product sales and revenue increased \$50.2 million to \$82.7 million for fiscal 2008, compared to \$32.5 million for fiscal 2007. Revenues were higher due to increased orders for our fuel cell power plants. Actual production in fiscal 2008 was approximately 22 MW of fuel cell products compared to approximately 11 MW in 2007. Revenue in fiscal 2008 included \$64.3 million of power plant sales compared to \$24.9 million in 2007, \$8.7 million related to site engineering and construction work for projects where we were responsible for complete power plant system

installation compared to \$0 in 2007, \$6.8 million related to service agreements and component sales compared to \$3.3 million in 2007 and \$2.9 million of revenue related to PPAs compared to \$4.3 million in 2007.

Cost of product sales and revenues increased to \$134.0 million for fiscal 2008, compared to \$61.8 million during 2007. The cost-to-revenue ratio was 1.62-to-1 during fiscal 2008, compared to 1.90-to-1 during the same period a year ago. The cost-to-revenue ratio was favorably impacted in fiscal 2008 by the shift to increased MW-class production and lower unit costs across all product lines.

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Service agreements and aftermarket costs, net of revenues, totaled \$19.9 million in fiscal 2008 compared to \$10.0 million in fiscal 2007. Service agreement and aftermarket costs increased due to a larger installed fleet and stack replacement costs related to early sub-MW product designs. Costs and margin were negatively impacted by replacement of our last generation three-year stack within our standard five-year LTSA. Products produced prior to fiscal 2008 had an expected stack life of approximately three years, which is less than the term of our standard LTSA. Under the terms of our LTSA, we may replace the customer's fuel cell stack with either a new or used unit if the power plant does not meet a minimum operating output during the term. Our contractual liability under the LTSA is limited to amount of service fees payable under the contract. This can often times be less than the cost of a new stack replacement. However, in order to continue to meet customer expectations on early product designs, we incur costs in excess of our contractual liabilities. Excluding this impact, the cost-to-revenue ratio would have been 1.40-to-1 during fiscal 2008, compared to 1.66-to-1 during the same period a year ago.

*Research and development contracts*

Research and development contracts revenue and related costs for the fiscal years ended October 31, 2008 and 2007 were as follows:

	<b>Year Ended October 31, 2008</b>	<b>Year Ended October 31, 2007</b>	<b>Percentage Change</b>
Research and development contracts	\$ 17,987	\$ 15,717	14%
Cost of research and development contracts	16,059	13,438	20%
Gross margin	\$ 1,928	\$ 2,279	(15)%

Research and development revenue increased \$2.3 million to \$18.0 million for fiscal 2008, compared to \$15.7 million for 2007. Cost of research and development contracts increased to \$16.1 million during fiscal 2008, compared to \$13.4 million for 2007. Margin from research and development contracts for 2008 was \$1.9 million or 11 percent, compared to \$2.3 million or 15 percent in 2007. Margin percentage on research and development contracts will vary with the level of cost share we are required to contribute. Research and development contract revenue and costs were primarily related to the DOE's large-scale SOFC hybrid and Vision 21 programs.

**Administrative and selling expenses**

Administrative and selling expenses increased \$1.4 million to \$20.0 million during fiscal 2008, compared to \$18.6 million in 2007. This was primarily driven by higher bid and proposal and other marketing activities over the prior year. Other increases included higher stock based compensation, business insurance and professional fees as a result of the growth in the business.

**Research and development expenses**

Research and development expenses decreased to \$23.5 million during fiscal 2008, compared to \$27.5 million recorded in 2007. The decrease was due to a shift of engineering resources to commercial activities, including planning for our production and capacity ramp, increased research contract activities, and supporting the installed power plant base.

**Loss from operations**

Loss from operations increased by \$19.7 million to \$92.8 million during fiscal 2008, compared to \$73.1 million recorded in 2007. The primary drivers to the increased loss were a higher loss on product sales of \$22.0 million due to higher production volumes and higher administrative and selling expenses of \$1.4 million partially offset by lower research and development expenses of \$4.0 million. Net results benefited from a favorable product mix and lower per unit production costs compared to the comparable prior year period.

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**Loss from equity investments**

Our share of equity losses for fiscal 2008 and 2007 were \$1.9 million and \$1.3 million, respectively. The increase in equity losses was attributable to higher losses at Versa.

**Interest and other income, net**

Interest and other income, net, was \$3.3 million for fiscal 2008, compared to \$7.4 million for 2007. We recognized state research and development tax credits totaling \$0.5 million in fiscal 2008, compared to \$1.2 million for 2007 on lower allowable research and development activity. Interest income also decreased during 2008 by \$3.1 million due to lower average invested balances and lower average interest rates.

Connecticut tax law allows certain companies to obtain cash refunds at an exchange rate of 65 percent of their research and development credits, in exchange for foregoing the carryforward of these credits into future tax years. We record Connecticut research and development tax credits in the period in which the return is filed, which is when management believes the amount of the credits are probable of collection.

**Provision for income taxes**

As of October 31, 2008, we had \$448 million of federal NOL carryforwards, \$343 million in state NOL carryforwards and \$7 million of Connecticut state tax credit carryforwards.

Based on projections for future taxable income over the period in which the deferred tax assets are realizable, management believed that significant uncertainty existed surrounding the recoverability of the deferred tax assets. Therefore, no tax benefit was recognized related to current or prior year losses and other deferred tax assets.

**Liquidity and Capital Resources**

Cash, cash equivalents, and investments in U.S. treasuries totaled approximately \$64.8 million as of October 31, 2009 compared to \$86.9 million as of October 31, 2008. Net cash and investments used during the year ended October 31, 2009 was \$22.1 million compared to \$66.7 million during fiscal 2008. We received cash inflows from the following equity offerings in fiscal 2009:

In June 2009, we received \$22.5 million, net of placement agent fees and offering expenses, from a registered direct offering of 6,737,166 shares of common stock at \$3.59 per share.

In October 2009, POSCO purchased \$25.0 million (6,963,788 shares) of our common stock.

Excluding these offerings, our net cash use for the fiscal year totaled \$69.6 million. During the full fiscal year 2009, our cash use was impacted by the credit crisis in the U.S. as well the working capital impact of a long commissioning cycle in South Korea related to new product installations. We responded to these issues by cutting costs early in the year through a reduction in work force and other cost reductions. As a result of reduced product costs and expected cash flow on existing contract backlog and improvements in the U.S. market, we are targeting cash use to be reduced to a more normalized range of \$10 to \$12 million per quarter in fiscal 2010. Actual quarterly cash use is impacted by numerous factors including the timing of new orders and customer payments, changes in working capital, capital spending and the factory production rate.

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We anticipate that our existing capital resources, together with anticipated revenues and cash flows, will be adequate to satisfy our financial requirements and agreements through at least the next twelve months. We are currently operating at a 30 MW run-rate and our current backlog is approximately 44 MW. Our future liquidity will be dependent on obtaining the order volumes and cost reductions on our fuel cell products necessary to achieve profitable operations. We may also raise capital through additional equity offerings; however, there can be no assurance that we will be able to obtain additional financing in the future. If we are unable to raise additional capital, our growth potential may be adversely affected and we may have to modify our plans.

**Cash Flows**

Cash, cash equivalents, and investments in U.S. Treasuries at October 31, 2009 and 2008 were as follows:

	<b>Year Ended October 31, 2009</b>	<b>Year Ended October 31, 2008</b>	<b>Change</b>
Cash and cash equivalents	\$ 57,823	\$ 38,043	\$ 19,780
U.S. Treasuries	7,004	48,840	(41,836)
Total	\$ 64,827	\$ 86,883	\$ (22,056)

Cash and cash equivalents at October 31, 2009 totaled \$57.8 million, reflecting an increase of \$19.8 million from October 31, 2008. We have earmarked \$3.9 million of our cash and cash equivalents as collateral against letters of credit, banking requirements and customer contracts. At October 31, 2009, we have an outstanding letter of credit for \$0.6 million with an expiration date of November 15, 2009. The key components of our cash inflows and outflows from operations were as follows:

**Operating Activities** During fiscal 2009, we used \$65.2 million in cash for operating activities, compared to \$61.4 million of cash used during 2008. Cash used in operating activities during fiscal 2009 consisted of the net loss for the year of \$68.7 million and changes in net working capital of \$13.8 million partially offset by non-cash charges totaling \$17.3 million.

Changes in net working capital resulting in a use of cash consisted primarily of an increase in accounts receivable of \$6.8 million due to timing of milestone payments from commercial customers, a decrease in accounts payable of \$7.1 million due to lower product costs and a shift to module only production and a decrease in deferred revenue, royalty income and customer deposits of \$5.3 million. Partially offsetting these changes were a decrease in other assets of \$2.4 million due to lower vendor advances and an increase in accrued liabilities of \$3.8 million primarily due to increases in reserves for service agreements, warranty and other costs associated with the larger installed fleet. Non-cash charges consisted primarily of share-based compensation of \$4.8 million, change in carrying value of equity investment and redeemable minority interest of \$2.9 million and depreciation expense of \$8.6 million.

Cash used in operating activities during fiscal 2008 consisted of a net loss for the period of \$93.4 million, offset by changes in net working capital of \$13.4 million and non-cash charges totaling \$18.6 million.

**Investing Activities** During fiscal 2009, net cash provided by investing activities totaled \$37.8 million compared to \$3.8 million of cash provided in 2008. Cash provided by investing activities in 2009 consisted of the maturity of \$41.0 million of investments in U.S. treasury securities partially offset by capital expenditures of \$2.6 million and a convertible debt investment in Versa of \$0.6 million.



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During fiscal 2008, net cash provided by investing activities totaled \$3.8 million. Net cash provided from the maturity and purchase of U.S. Treasury securities was \$11.2 million as \$79.1 million of investments in U.S. Treasury securities matured and new U.S. Treasury purchases totaled \$67.9 million. Partially offsetting this increase were capital expenditures of \$7.4 million partially related to expanding our manufacturing capacity to an annual minimum of 60 MW of production

***Financing Activities*** During fiscal 2009, net cash provided by financing activities totaled \$47.2 million compared to \$2.6 million in 2008. Cash provided by financing activities during 2009 consisted primarily of \$50.3 million from the sale and issuance of common stock partially offset by the payment of preferred stock dividends of \$3.6 million. As previously discussed, we raised \$22.5 million, net of fees, from the sale of common stock in a direct registered stock offering and POSCO purchased \$25.0 million of our common stock in connection with the execution of the 2009 License Agreement.

During fiscal 2008, net cash provided by financing activities was \$2.6 million. Activity in fiscal 2008 included \$3.6 million for the payment of dividends on preferred stock and repayment of debt of \$0.4 million. These cash outflows were offset by receipts of \$3.2 million from the sale of common stock and \$3.6 million of cash borrowed from the Connecticut Development Authority for equipment purchases associated with manufacturing capacity expansion.

**Sources and Uses of Cash and Investments**

We continue to invest in new product and market development and, as such, we are not currently generating positive cash flow from operations. Our operations are funded primarily through sales of equity and debt securities, cash generated from product sales, service contracts and PPAs, incentive funding, government research and development contracts, and interest earned on investments. In order to produce positive cash flow from operations, we need to be successful at increasing annual order volume and implementing our cost reduction efforts as well as continuing involvement in research and development contracts. Status of these activities is described below.

***Increasing annual order volume***

We need to increase annual order volume to achieve profitability. Increased production volumes lower costs by leveraging supplier/purchasing opportunities, creating opportunities for incorporating manufacturing process improvements, and spreading fixed costs over more units. Our overall manufacturing process (module manufacturing, final assembly, testing and conditioning) has a production capacity of 70 MW per year. To expand to a production capacity of 150 MW, we would need to make capital investments of approximately \$35 to \$45 million. Our production volume was at an annual rate of 30 MW in fiscal 2009 and our current product sales backlog is approximately 44 MW.

We sell completed power plants, fuel cell modules and fuel cell module kits (components). Based on the current backlog, we expect the mix of production to move primarily to 1.4 MW modules and kits in 2010. We believe we can reach gross margin breakeven at a sustained annual order and production volume of approximately 35 to 70 MW and net income breakeven at a sustained annual order and production volume of approximately 75 to 125 MW. The low end for each of these ranges requires sustained annual production primarily of our DFC3000 power plants and fuel cell modules and the high end of the range includes a mix of our DFC1500 and DFC300 power plants. Actual results will depend on product mix, volume, mix of full power plants vs. modules only, future service costs, and market pricing.

Updates on our key markets, including South Korea, California and Connecticut are as follows:

***South Korea*** Ultra-clean, highly efficient fuel cell power plants meet South Korea's need for increased production of clean power and green technologies that contribute to increased domestic employment as well as its mandate for clean energy generation. South Korea has committed 2 percent of its gross national product to clean energy projects more than any other developed country. Currently, South Korea is pursuing the passage of an \$85.8 billion renewable energy plan that includes a RES of 4.3 percent clean energy by 2015, or approximately 2,800 MW and 11 percent clean energy by 2030, or approximately 7,150 MW. Stationary fuel cells operating on natural gas are expected to be included in the program and our products should be well positioned to contribute significantly to this goal. The South Korean government's proposed energy policy is an example of a strategy to meet both the country's domestic energy and environmental

objectives and to create a green technology industrial base that will become the foundation for a global export market.

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We have entered in a long-term strategic alliance with POSCO to market, manufacture and distribute our power plants in South Korea. POSCO has extensive experience in power plant project development, having built over 2,400 MW of power plants, equivalent to 3.7 percent of South Korea's national capacity. In 2009, we entered in the 2009 License Agreement allowing POSCO to produce fuel cell stack modules from cells and components provided by us. This agreement is part of our strategy to localize certain power plant manufacturing. Locating final assembly closer to end users reduces costs, ensures products meet the needs of individual markets, and in effect, expands our manufacturing capacity. Localizing fuel cell module assembly and conditioning has important benefits for both parties. It allows POSCO more domestic content, supporting its work with the South Korean government to pass enabling legislation. It also drives increased demand for our cell components. As a result of the new license, we can continue to reduce product costs for the Asian market through lower shipping costs, import duties and taxes.

POSCO has already built a 50 MW manufacturing facility which produces balance-of-plant systems, which will be integrated with fuel cell modules at customer sites, and they will build an additional facility to assemble and manufacture fuel cell modules.

POSCO ordered 30.8 MW of our DFC Power Plants during fiscal 2009, bringing POSCO's total orders to date to 69 MW. Approximately 23 MW are now installed and operating at customer sites in South Korea, of which six are our 2.4 MW DFC3000 power plants. Five of these power plants are operating at large independent power producers and one is operating at a KEPCO subsidiary (South Korea's electric utility). These are serving as showcase sites as POSCO executes its strategy to make our power plants the leading alternative for utilities seeking to comply with the country's RES program.

**California** California has been on the leading edge of clean technology adoption, and is currently our second biggest market after South Korea. Our sales pipeline in California continues to grow and we are working to close orders as evidenced by 2009 orders from Sonoma County and the City of Tulare. Order closure from our California project opportunities were significantly impacted during the year as our partners and end user customers dealt with the lack of available financing for all types of power generation projects. We are beginning to see the return of traditional project financing in some parts of the power generation market.

In support of these opportunities, California again demonstrated its commitment to reducing greenhouse gases and encouraging clean distributed generation by extending its Self-Generation Incentive Program (SGIP) to 2015. Under this program, qualifying fuel cell projects of up to 3 MW are eligible for incentives of up to \$4,500 per kilowatt when operating on biogas and up to \$2,500 per kilowatt when operating on natural gas. Currently there is about \$200 million in the program and ongoing annual funding is expected to be roughly \$83 million. Those planning capital projects like wastewater treatment plants now have the certainty that the SGIP will be available for several more years.

The California legislature has passed two feed-in tariffs. One was for combined heat and power applications under which our fuel cell projects qualify. The second was a renewable feed-in-tariff signed in October. Once the feed-in-tariffs are set, they could enable power producers to export excess electricity back into the grid. The feed-in-tariffs could make it more economically attractive to generate power using fuel cells, and lead to wider deployment. The California Public Utilities Commission is currently working to set pricing these tariffs and we expect the commission to rule in 2010.

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***Connecticut*** Connecticut's RPS requires utilities to purchase 20 percent of their peak electricity needs, or about 1,000 MW, from clean power sources by 2020. During 2009, Connecticut's DPUC finalized the selection of 27.3 MW of projects incorporating our power plants, bringing the total approved projects to 43.5 MW. All of the projects utilize our 2.8 MW DFC3000 power plants either alone or in combination with turbines.

Each of these projects has executed power purchase agreements with utilities. The Company and the project developers are in discussions with financiers to fund the projects. We have also submitted and are going through an application review process for these projects under the DOE's \$6 billion loan guarantee program.

***Cost reduction efforts***

Product cost reductions are essential for us to more fully penetrate the market for our fuel cell products and attain profitability. Cost reductions will also reduce or eliminate the need for incentive funding programs which currently allow us to price our products to compete with grid-delivered power and other distributed generation technologies.

Product cost reductions come from several areas:

- engineering improvements;
- technology advances;
- supply chain management;
- production volume; and
- manufacturing process improvements.

Since 2003, we have made significant progress in reducing the total life cycle costs of our power plants primarily through value engineering our products, manufacturing process improvements, technology improvements, and global sourcing.

During the third quarter, we began production of our lower-cost, higher-output DFC1500 and DFC3000 models incorporating 350 kilowatt stacks. The new DFC1500 generates 1.4 MW of power and the DFC3000 generates 2.8 MW of power. By producing more power in a power plant, the power plants cost less per unit to manufacture. We believe that with sufficient sales volume, production of these lower cost MW-class power plants will move our Company to profitability. We are also developing and expect to bring to market products with a stack life greater than five-years. Extending stack life increases the sales value of the product and reduces service costs.

***Continued involvement in research and development contracts***

Our research and development contracts are generally multi-year, cost reimbursement contracts. The majority of these are U.S. Government contracts that are dependent upon the government's continued allocation of funds and may be terminated in whole or in part at the convenience of the government. We will continue to seek research and development contracts, and to obtain these contracts, we must continue to prove the benefits of our technologies and be successful in our competitive bidding.

**Table of Contents****Commitments and Significant Contractual Obligations**

A summary of our significant future commitments and contractual obligations as of October 31, 2009 and the related payments by fiscal year is summarized as follows:

	<b>Total</b>	<b>Payments Due by Period</b>			
		<b>Less than 1 Year</b>	<b>1 3 Years</b>	<b>3 5 Years</b>	<b>More than 5 Years</b>
<b>Contractual Obligation:</b>					
Capital and operating lease commitments <sup>(1)</sup>	\$ 4,570	\$ 999	\$ 1,580	\$ 1,468	\$ 523
Term loans (principal and interest)	6,007	984	730	730	3,563
Purchase commitments <sup>(2)</sup>	26,969	23,892	2,859	218	
Series B Preferred dividends payable <sup>(3)</sup>					
Series 1 Preferred dividends payable <sup>(4)</sup>	23,060	463	13,334	2,316	6,947
<b>Totals</b>	<b>\$ 60,606</b>	<b>\$ 26,338</b>	<b>\$ 18,503</b>	<b>\$ 4,732</b>	<b>\$ 11,033</b>

(1) Future minimum lease payments on capital and operating leases.

(2) Purchase commitments with suppliers for materials, supplies and services incurred in the normal course of business.

(3) We are currently paying \$3.2 million in annual dividends on our Series B Preferred Stock. Dividends on Series B Preferred Stock accrue at an annual rate of 5 percent and are paid quarterly. 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 percent of the then prevailing conversion price (\$11.75 at November 20, 2009) for 20 trading days during any consecutive 30 trading day period, as described in the certificate of designation for the Series B Preferred Stock. The \$3.2 million annual dividend payment has not been included as we cannot reasonably determine when and if we will be able to convert the Series B Preferred Stock into shares of our common stock.

- (4) Annual dividends of Cdn.\$1.25 million (\$1.16 million based on the October 31, 2009 exchange rate of Cdn.\$0.93 to

U.S.\$1.00) accrue on the Series 1 Preferred Stock. We have agreed to pay a minimum of Cdn.\$500,000 (\$465,000 based on an exchange rate of Cdn.\$0.93 to U.S.\$1.00) in cash or common stock annually to Enbridge, the holder of the Series 1 Preferred Stock, so long as Enbridge holds the shares. Interest accrues on cumulative unpaid dividends at an annual rate of 9 percent until payment thereof. Using the exchange rate of Cdn.\$0.93 to U.S.\$1.00, cumulative unpaid dividends and accrued interest on October 31, 2009 was \$9.8 million. All cumulative unpaid dividends and accrued interest must be paid by December 31, 2010 and subsequently the required annual dividend payment increases to Cdn.\$1.25 million. The payment amounts above assume (i) that the minimum dividend payments are made through December 31, 2010, (ii) that all

cumulative unpaid dividends and accrued interest are paid on December 31, 2010, (iii) that the annual dividend of Cdn.\$1.25 million is paid thereafter, and (iv) an exchange rate of Cdn.\$0.93 to U.S.\$1.00. We have the option of paying these amounts in stock or cash.

In April 2008, we entered into a new 10-year loan agreement with the Connecticut Development Authority allowing for a maximum amount borrowed of \$4.0 million. At October 31, 2009, we had an outstanding balance of \$4.0 million on this loan. The stated interest rate is 5 percent and the loan will be collateralized by the assets procured under this loan as well as \$4.0 million of additional machinery and equipment. Repayment terms require (i) interest only payments on outstanding balances through November 2009 and (ii) interest and principal payments commencing in December 2009 through May 2018.

We have identified uncertain tax positions aggregating \$15.7 million and reduced our NOLs by this amount. Because of the level of NOLs and valuation allowances, unrecognized tax benefits, even if not resolved in our favor, would not result in any cash payment or obligation and therefore have not been included in the contractual obligation table above.

In addition to the commitments listed in the table above, we have the following outstanding obligations:



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***Power purchase agreements***

As of October 31, 2009, we had 3 MW of power plant installations under PPAs ranging in duration from five to ten years. As owner of the power plants, 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, primarily natural gas, to run the power plants.

We qualified for incentive funding for these projects in California under the state's SGIP and 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 during the period specified by the government program. Revenue related to these incentive funds is recognized ratably over the performance period. As of October 31, 2009 we had deferred revenue totaling \$2.6 million related to incentive funding received on PPAs, which will be earned and recognized in fiscal 2010.

***Service and warranty agreements***

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs on products that have sufficient operating experience to allow for management to reasonably estimate warranty obligations. For newer products where we have limited operating experience, warranty costs are currently expensed as incurred. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects.

In addition to the standard product warranty of one year, we have contracted with certain customers to provide services to maintain, monitor and repair customer power plants to meet minimum operating levels for terms ranging from one to 13 years, with our standard LTSA term being five years. Should the power plant not meet the minimum operating levels, we may be required to replace the fuel cell stack with a new or used stack. Pricing for service contracts is based upon estimates of future costs, which given our products' early stage of development, could be materially different from actual expenses. Our contractual liability under LTSAs is limited to the amount of service fees payable under the contract.

***Research and development cost-share contracts***

We have contracted with various government agencies as either a prime contractor or sub-contractor on cost-share contracts and agreements. Cost-share terms require that participating contractors share the total cost of the project based on an agreed upon ratio with the government agency. As of October 31, 2009, our research and development sales backlog totaled \$14.2 million. We expect to incur additional research and development cost-share related to this backlog totaling approximately \$6.0 million that will not be reimbursed by the government.

***Recent Accounting Pronouncements***

In June 2009, the Financial Accounting Standard Board ( FASB ) issued new accounting guidance on the Accounting Standards Codification ( Codification ) and the hierarchy of generally accepted accounting principles (Accounting Standards Codification ( ASC ) 105-10). The Codification is now the single source of authoritative generally accepted accounting principles ( GAAP ) applied by nongovernmental entities and supersedes all existing FASB, American Institute of Certified Public Accountants, Emerging Issues Task Force and related literature. The Codification eliminates the previous U.S. GAAP hierarchy and establishes one level of authoritative GAAP. All other literature is considered non-authoritative. The Codification is not intended to change GAAP but rather reorganize divergent accounting literature into an accessible and user-friendly system. The Codification was effective for financial statements issued for interim and annual periods ending after September 15, 2009. We adopted the Codification as of October 31, 2009 and it impacted our disclosures by eliminating all references to pre-Codification standards, however there was no impact to our consolidated financial statements.

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In June 2009, the FASB issued accounting guidance (ASC 810) which requires a company to perform ongoing reassessment of whether it is the primary beneficiary of a variable interest entity ( VIE ). Specifically, the guidance modifies how a company determines when an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. The guidance clarifies that the determination of whether a company is required to consolidate a VIE is based on, among other things, an entity s purpose and design and a company s ability to direct the activities of the VIE that most significantly impact the VIE s economic performance. The guidance requires an ongoing reassessment of whether a company is the primary beneficiary of a VIE and enhanced disclosures of the company s involvement in VIEs and any significant changes in risk exposure due to that involvement. The guidance is effective for the first quarter of fiscal 2010 and we do not expect there will be a material impact on our consolidated financial statements.

In May 2009, the FASB issued accounting guidance for subsequent events (ASC 855-10) which incorporates the subsequent events guidance contained in the auditing standards literature into authoritative accounting literature. It also requires entities to disclose the date through which they have evaluated subsequent events and whether the date corresponds with the release of their financial statements. The accounting guidance is effective for all interim and annual periods ending after June 15, 2009. We adopted this guidance for the year ended October 31, 2009. The adoption of this guidance did not have a material effect on our consolidated financial statements.

In April 2009, the FASB issued accounting guidance for interim disclosures about financial instruments (ASC 825-10) to require disclosures about fair value of financial instruments in interim financial statements (ASC 270-10) as well as in annual financial statements. We adopted this guidance in the third quarter 2009. As the guidance requires only additional disclosures, the adoption did not have a material effect on our consolidated financial statements.

In April 2008, the FASB issued accounting guidance that amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset (ASC 350-10). In developing assumptions about renewal or extension options used to determine the useful life of an intangible asset, an entity needs to consider its own historical experience adjusted for entity-specific factors. In the absence of that experience, an entity shall consider the assumptions that market participants would use about renewal or extension options. The new guidance is effective in the first quarter of fiscal 2010. We currently do not have any intangible assets recorded in our consolidated balance sheets; therefore, the impact of the adoption of this guidance on our consolidated financial statements will be determined when and if we record or purchase (e.g. by acquisition) any definite-lived intangible assets.

In March 2008, the FASB issued accounting guidance that expands the disclosure requirements about an entity s derivative instruments and hedging activities (ASC 815-10). The guidance requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. We adopted this guidance as required during the second quarter of fiscal 2009. As the guidance requires only additional disclosures, the adoption did not have a material effect on our consolidated financial statements.

In December 2007, the FASB issued revised accounting guidance for business combinations (ASC 805-10) that requires an acquirer to measure the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values on the acquisition date, with goodwill being the excess value over the net identifiable assets acquired. The guidance also requires that certain other assets and liabilities related to the acquisition such as contingencies and research and development, be recorded at fair value. The new guidance will be effective in the first quarter of fiscal 2010. The potential impact of this revised guidance on our consolidated financial statements will be based upon future business combinations, if any.

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In December 2007, the FASB issued new guidance on noncontrolling interests in consolidated financial statements (ASC 810-10). This guidance requires that a noncontrolling interest in a subsidiary be reported as equity in the consolidated financial statements. Consolidated net income should include the net income for both the parent and the noncontrolling interest with disclosure of both amounts in the consolidated statements of operations. The calculation of earnings per share will continue to be based on income amounts attributable to the parent. The new guidance will be effective in the first quarter of fiscal year 2010. We currently do not expect the adoption of the revised guidance will have a material effect on our consolidated financial statements.

In February 2007, the FASB issued accounting guidance that allowed entities to measure most financial instruments at fair value if desired (ASC 825-10). The guidance may be applied on a contract by contract basis and is irrevocable once applied to those contracts. The guidance may be applied at the time of adoption for existing eligible items, or at initial recognition of eligible items. Those items measured at fair value must be shown separately on the balance sheet, and changes in fair value are reported in earnings. We have elected not to apply the fair value option to any of our existing financial instruments.

**Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

**Interest Rate Exposure**

We typically invest in U.S. Treasury securities with maturities ranging from less than three months to one year or more. We expect to hold these investments until maturity and accordingly, these investments are carried at cost and not subject to mark-to-market accounting. At October 31, 2009, our U.S. Treasury investments had a carrying value of \$7.0 million and maturity dates ranging from December 31, 2009 to April 30, 2010. The fair value of these securities at October 31, 2009 approximated their carrying value. The carrying value and fair value of our U.S. Treasury investments at October 31, 2008 was \$48.8 million and \$49.1 million, respectively. Cash is invested overnight with high credit quality financial institutions and therefore we are not exposed to market risk from changing interest rates. Based on our overall interest rate exposure at October 31, 2009, including all interest rate sensitive instruments, a change in interest rates of one percent would affect our results of operations by \$0.6 million.

**Foreign Currency Exchange Risk**

As of October 31, 2009, less than one percent of our total cash, cash equivalents and investments were in currencies other than U.S. dollars (primarily Canadian dollars and South Korean Won). We make purchases from certain vendors in currencies other than U.S. dollars. Although we have not experienced significant foreign exchange rate losses to date, we may in the future, especially to the extent that we do not engage in currency hedging activities. The economic impact of currency exchange rate movements on our operating results is complex because such changes are often linked to variability in real growth, inflation, interest rates, governmental actions and other factors. These changes, if material, may cause us to adjust our financing and operating strategies.

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**Derivative Fair Value Exposure**

***Series 1 Preferred Stock***

Our Series 1 Preferred shares include embedded derivatives that require bifurcation from the host contract. Specifically, the embedded derivatives requiring bifurcation from the host contract include the conversion feature of the security and the variable dividend obligation. The aggregate fair value of these derivatives included within long-term debt and other liabilities in our consolidated balance sheets as of October 31, 2009 and 2008 was \$0.5 million and \$0.3 million, respectively. The fair value was based on valuation models using various assumptions including historical stock price volatility, risk-free interest rate and a credit spread based on the yield indexes of technology high yield bonds, foreign exchange volatility as the Series 1 Preferred security is denominated in Canadian dollars, and the closing price of our common stock. Changes in any of these assumptions would change the underlying fair value with a corresponding charge or credit to earnings. However, any changes to the assumptions would not have a material effect on our results of operations or financial condition.

***Warrants***

In connection with our investment in Versa, we received warrants for the right to purchase additional shares of Versa's common stock. At October 31, 2009 and 2008, we held warrants for the right to purchase 3,108 and 2,286 shares of Versa's common stock, respectively. We have determined that these warrants represent derivatives. The fair value of the warrants is based on the Black-Scholes valuation model using historical stock price, volatility (based on a peer group since Versa's common stock is not publicly traded) and risk-free interest rate assumptions. The fair value of the warrants at October 31, 2009 and 2008 was \$0.2 million and \$0.3 million, respectively and was included within investment and loan to affiliate in our consolidated balance sheets. Changes in any of these assumptions would result in a change in the fair value of the warrants and impact our results of operations; however, the impact is not expected to be material. For example, a 10 percent increase in the volatility assumption would have resulted in a charge to earnings of \$20 thousand and \$18 thousand, assuming all other assumptions remain the same, for the years ended October 31, 2009 and 2008, respectively.

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**Item 8. CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**  
**Index to the Consolidated Financial Statements**

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<u>Consolidated Statements of Operations for the Years Ended October 31, 2009, 2008 and 2007</u>	69
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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders

FuelCell Energy, Inc.:

We have audited the accompanying consolidated balance sheets of FuelCell Energy, Inc. and subsidiaries as of October 31, 2009 and 2008, and the related consolidated statements of operations, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended October 31, 2009. We also have audited FuelCell Energy, Inc.'s internal control over financial reporting as of October 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). FuelCell Energy, Inc.'s management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying management report on internal controls over financial reporting. Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the consolidated financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of FuelCell Energy, Inc. and subsidiaries as of October 31, 2009 and 2008, and the results of their operations and their cash flows for each of the years in the three-year period ended October 31, 2009, in conformity with U.S. generally accepted accounting principles. Also in our opinion, FuelCell Energy, Inc. maintained, in all material respects, effective internal control over financial reporting as of October 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ KPMG LLP

Hartford, Connecticut

January 14, 2010



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**FUELCELL ENERGY, INC.**  
**Consolidated Balance Sheets**  
(Amounts in thousands, except share and per share amounts)

	<b>October 31, 2009</b>	<b>October 31, 2008</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 57,823	\$ 38,043
Investments: U.S. treasury securities	7,004	30,406
Accounts receivable, net of allowance for doubtful accounts of \$19 and \$51, respectively	22,920	16,096
Inventories, net	25,433	24,523
Other current assets	6,499	8,952
<b>Total current assets</b>	<b>119,679</b>	<b>118,020</b>
Property, plant and equipment, net	32,394	38,259
Investments: U.S. treasury securities		18,434
Investment and loan to affiliate	10,064	10,405
Other assets, net	551	358
<b>Total assets</b>	<b>\$ 162,688</b>	<b>\$ 185,476</b>
<b>LIABILITIES AND SHAREHOLDERS EQUITY</b>		
Current liabilities:		
Current portion of long-term debt and other liabilities	\$ 997	\$ 795
Accounts payable	8,484	16,287
Accounts payable due to affiliate	1,584	724
Accrued liabilities	13,808	11,023
Deferred revenue, royalty income and customer deposits	17,013	29,585
<b>Total current liabilities</b>	<b>41,886</b>	<b>58,414</b>
Long-term deferred revenue and royalty income	10,124	2,672
Long-term debt and other liabilities	4,410	4,075
<b>Total liabilities</b>	<b>56,420</b>	<b>65,161</b>
Redeemable minority interest	14,976	13,307
Redeemable convertible preferred stock (liquidation preference of \$64,120 at October 31, 2009 and 2008.)	59,950	59,950
Commitments and Contingencies (Note 16)		
Shareholders' equity:		
Common stock, (\$.0001 par value; 150,000,000 shares authorized; 84,387,741 and 68,782,446 shares outstanding at October 31, 2009 and 2008, respectively)	8	7
Additional paid-in capital	631,296	578,337
Accumulated deficit	(599,960)	(531,286)



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Accumulated other comprehensive loss	(2)	
Treasury stock, Common, at cost (5,679 and 8,981 shares at October 31, 2009 and 2008, respectively)	(53)	(90)
Deferred compensation	53	90
Total shareholders' equity	31,342	47,058
Total liabilities and shareholders' equity	\$ 162,688	\$ 185,476

See accompanying notes to consolidated financial statements.

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**FUELCELL ENERGY, INC.**  
**Consolidated Statements of Operations**  
**For the Years Ended October 31, 2009, 2008, and 2007**  
**(Amounts in thousands, except share and per share amounts)**

	<b>Years Ended October 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Revenues:			
Product sales and revenues	\$ 73,804	\$ 82,748	\$ 32,517
Research and development contracts	14,212	17,987	15,717
<b>Total revenues</b>	<b>88,016</b>	<b>100,735</b>	<b>48,234</b>
Costs and expenses:			
Cost of product sales and revenues	107,033	134,038	61,827
Cost of research and development contracts	10,994	16,059	13,438
Administrative and selling expenses	17,194	19,968	18,625
Research and development expenses	19,160	23,471	27,489
<b>Total costs and expenses</b>	<b>154,381</b>	<b>193,536</b>	<b>121,379</b>
<b>Loss from operations</b>	<b>(66,365)</b>	<b>(92,801)</b>	<b>(73,145)</b>
Interest expense	(265)	(100)	(84)
Loss from equity investments	(812)	(1,867)	(1,263)
Interest and other income, net	860	3,268	7,471
<b>Loss before redeemable minority interest</b>	<b>(66,582)</b>	<b>(91,500)</b>	<b>(67,021)</b>
Redeemable minority interest	(2,092)	(1,857)	(1,653)
<b>Loss before provision for income taxes</b>	<b>(68,674)</b>	<b>(93,357)</b>	<b>(68,674)</b>
Provision for income taxes			
<b>Net loss</b>	<b>(68,674)</b>	<b>(93,357)</b>	<b>(68,674)</b>
Preferred stock dividends	(3,208)	(3,208)	(3,208)
<b>Net loss to common shareholders</b>	<b>\$ (71,882)</b>	<b>\$ (96,565)</b>	<b>\$ (71,882)</b>
Loss per share basic and diluted:			

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Net loss to common shareholders	\$ (0.99)	\$ (1.41)	\$ (1.16)
Basic and diluted weighted average shares outstanding	72,392,928	68,570,689	61,990,555

See accompanying notes to consolidated financial statements.

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**FUELCELL ENERGY, INC.**  
**Consolidated Statements of Changes in Shareholders' Equity**  
**For the Years Ended October 31, 2009, 2008, and 2007**  
(Amounts in thousands, except share and per share amounts)

	Shares of common stock	Common stock	Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Treasury stock	Deferred compensation	Total Shareholders' Equity
<b>Balance at October 31, 2006</b>	53,130,901	\$ 5	\$ 470,045	\$ (369,255)	\$	\$ (158)	\$ 158	\$ 100,795
Sale of common stock	13,467,730	2	96,712					96,714
Share-based compensation			5,167					5,167
Issuance of warrants under distributor agreement			10					10
Stock issued under benefit plans	1,483,127		3,218					3,218
Preferred dividends Series B			(3,208)					(3,208)
Deferred compensation	3,301					32	(32)	
Net loss				(68,674)				(68,674)
<b>Balance at October 31, 2007</b>	68,085,059	7	571,944	(437,929)		(126)	126	134,022
Sale of common stock	180,000		1,689					1,689
Share-based compensation			5,529					5,529
Stock issued under benefit plans	514,086		2,383					2,383
Preferred dividends Series B			(3,208)					(3,208)
Deferred compensation	3,301					36	(36)	
Net loss				(93,357)				(93,357)
<b>Balance at October 31, 2008</b>	68,782,446	7	578,337	(531,286)		(90)	90	47,058
Sale of common stock	14,450,118	1	50,193					50,194
Share-based compensation			4,815					4,815
Stock issued under benefit plans	1,151,875		1,307					1,307
			(3,208)					(3,208)

Preferred dividends Series B									
Change in fair value of warrants			(148)						(148)
Deferred compensation	3,302				37	(37)			
Effect of foreign currency translation				(2)					(2)
Net loss			(68,674)						(68,674)
<b>Balance at October 31, 2009</b>	84,387,741	\$ 8	\$ 631,296	\$ (599,960)	\$ (2)	\$ (53)	\$ 53	\$	31,342

See accompanying notes to consolidated financial statements.

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**FUELCELL ENERGY, INC.**  
**Consolidated Statements of Cash Flows**  
**For the Years Ended October 31, 2009, 2008, and 2007**  
(Amounts in thousands, except share and per share amounts)

	Years Ended October 31,		
	2009	2008	2007
<b>Cash flows from operating activities:</b>			
Net loss	\$ (68,674)	\$ (93,357)	\$ (68,674)
Adjustments to reconcile net loss to net cash used in operating activities:			
Share-based compensation	4,815	5,529	5,167
Loss in equity investments	812	1,867	1,263
Redeemable minority interest	2,092	1,857	1,653
Interest receivable on loan to affiliate	(141)	(162)	(69)
Asset impairment		179	
Loss (gain) on derivatives	330	(99)	83
Depreciation and amortization	8,591	8,801	9,185
Amortization (accretion) of bond premium (discount)	836	607	(740)
(Recovery) provision for doubtful accounts	(32)	(13)	20
(Increase) decrease in operating assets:			
Accounts receivable	(6,792)	(6,020)	(681)
Inventories	(910)	5,058	(11,517)
Other assets	2,402	(1,462)	(4,668)
Increase (decrease) in operating liabilities:			
Accounts payable	(7,050)	4,614	(111)
Accrued liabilities	3,786	3,824	3,218
Deferred revenue and customer deposits	(5,268)	7,370	9,902
<b>Net cash used in operating activities</b>	<b>(65,203)</b>	<b>(61,407)</b>	<b>(55,969)</b>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(2,588)	(7,368)	(4,409)
Convertible loan to affiliate	(600)		(2,000)
Treasury notes matured	41,000	79,100	312,120
Treasury notes purchased		(67,913)	(277,674)
<b>Net cash provided by investing activities</b>	<b>37,812</b>	<b>3,819</b>	<b>28,037</b>
<b>Cash flows from financing activities:</b>			
Repayment of debt	(237)	(449)	(438)
Proceeds from debt	436	3,564	354
Net proceeds from sale of common stock	50,332	2,091	96,257
Payment of preferred dividends	(3,631)	(3,642)	(3,642)
Common stock issued for option and stock purchase plans	273	1,070	2,151
<b>Net cash provided by financing activities</b>	<b>47,173</b>	<b>2,634</b>	<b>94,682</b>
Effects on cash from changes in foreign currency rates	(2)		

<b>Net increase (decrease) in cash and cash equivalents</b>	<b>19,780</b>	<b>(54,954)</b>	<b>66,750</b>
Cash and cash equivalents-beginning of year	38,043	92,997	26,247
<b>Cash and cash equivalents-end of year</b>	<b>\$ 57,823</b>	<b>\$ 38,043</b>	<b>\$ 92,997</b>

See accompanying notes to the consolidated financial statements.

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**FUELCELL ENERGY, INC.**

Notes to Consolidated Financial Statements

**For the Years Ended October 31, 2009, 2008, and 2007**

(Tabular amounts in thousands, except share and per share amounts)

**Note 1. Nature of Business and Significant Accounting Policies**

***Nature of Business***

FuelCell Energy, Inc. and subsidiaries (the Company, we, us, our) are engaged in the development and manufacturing of high temperature fuel cells for clean electric power generation. Our Direct FuelCell power plants produce reliable, secure and environmentally friendly 24/7 base load electricity for commercial, industrial, government and utility customers. We have commercialized our stationary fuel cells and are beginning the development of planar solid oxide fuel cell and other fuel cell technology. We expect to incur losses as we continue to participate in government cost share programs, sell products at prices lower than our current production costs, and invest in our cost reduction initiatives.

The consolidated financial statements include our accounts and those of our subsidiaries, including FuelCell Energy, Ltd. ( FCE Ltd. ), our Canadian subsidiary; Bridgeport Fuel Cell Park, LLC ( BFCP ), DFC-ERG Milford, LLC and DFC-ERG Connecticut, LLC, which were formed for the purpose of developing projects within Connecticut; and FCE Korea Ltd., which was formed to facilitate our business operations in South Korea. Alliance Monterrey, LLC; Alliance Chico, LLC; Alliance Star Energy, LLC; and Alliance TST Energy, LLC, (collectively, the Alliance Entities ) are joint ventures with Alliance Power, Inc. ( Alliance ) established to construct fuel cell power plants and sell power under power purchase agreements ( PPA ). We have an 80 percent interest in each entity and accordingly, the financial results of the Alliance Entities are consolidated with our financial results. We have not recorded a minority interest related to the Alliance Entities as these entities have a capital deficit, which we do not believe is collectible from the minority interest holder and therefore has been fully reserved. All intercompany accounts and transactions have been eliminated.

Certain reclassifications have been made to our prior year amounts to conform to the 2009 presentation.

***Significant Accounting Policies***

***Cash and Cash Equivalents***

Cash equivalents consist primarily of investments in money market funds and U.S. Treasury securities with original maturities averaging three months or less at date of acquisition. We place our temporary cash investments with high credit quality financial institutions. We have earmarked \$3.9 million of our cash and cash equivalents as collateral against letters of credit, banking requirements and customer contracts. At October 31, 2009, we had an outstanding letter of credit of \$0.6 million.

***Investments***

Investments consist of U.S. Treasury securities with original maturities of greater than three months at the date of acquisition. The notes are classified as held-to-maturity since we have the ability and intention to hold them until maturity. The notes are carried at amortized cost, which is par value, plus or minus unamortized premium or discount. We classify notes with remaining maturities of one year or less as current assets and notes with remaining maturities greater than one year as non-current assets.

***Inventories and Advance Payments to Vendors***

Inventories consist principally of raw materials and work-in-process and are stated at the lower of cost or market. In certain circumstances, we will make advance payments to vendors for future inventory deliveries. These advance payments are recorded as other current assets in the consolidated balance sheets.



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**FUELCELL ENERGY, INC.**

Notes to Consolidated Financial Statements

**For the Years Ended October 31, 2009, 2008, and 2007**

(Tabular amounts in thousands, except share and per share amounts)

As we have historically sold products at or below cost, we provide for a lower of cost or market adjustment to the cost basis of inventory. This adjustment is computed by comparing the current sales prices of our power plants to estimated costs of completed power plants. During fiscal 2009, we began production of our newest MW-class power plants. The new design incorporates new stacks with outputs of 350 kW each compared to 300 kW previously, along with lower component and raw material costs derived from process improvements, volume manufacturing and global sourcing. As we gain further operating experience, management may reevaluate its accounting estimates for inventory reserves in future periods, if necessary.

*Property, Plant and Equipment*

Property, plant and equipment are stated at cost, less accumulated depreciation provided on the straight-line method over the estimated useful lives of the respective assets. Leasehold improvements are amortized on the straight-line method over the shorter of the estimated useful lives of the assets or the term of the lease. When property is sold or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is reflected in operations for the period.

*Intellectual Property*

Intellectual property, including internally generated patents and know-how, is carried at no value.

*Impairment of Long Lived Assets*

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset group may not be recoverable. If events or changes in circumstances indicate that the carrying amount of the asset group may not be recoverable, we compare the carrying amount of the asset group to future undiscounted net cash flows, excluding interest costs, expected to be generated by the asset group and their ultimate disposition. If the sum of the undiscounted cash flows is less than the carrying value, the impairment to be recognized is measured by the amount by which the carrying amount of the asset group exceeds the fair value of the asset group. Assets to be disposed of are reported at the lower of the carrying amount or fair value, less costs to sell.

*Revenue Recognition*

We earn revenue from (i) the sale and installation of fuel cell power plants and component parts to customers (i.e. product sales), (ii) providing services under long-term service contracts, (iii) the sale of electricity under PPAs, (iv) incentive revenue from the sale of electricity under PPAs, (v) site engineering and construction services and (vi) customer-sponsored research and development projects. Our revenue is primarily generated from customers located throughout the U.S., Asia and Europe and from agencies of the U.S. government. Revenue from customer-sponsored research and development projects is recorded as research and development contracts revenue and all other revenues are recorded as product sales and revenues on the consolidated statements of operations. Revenues from fuel cell product 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 term of 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 term of the contract. Revenues from the sale of electricity are recognized as electricity is provided to the customer. Incentive revenue is recognized ratably over the term of the PPA. Site engineering and construction services revenue is recognized as costs are incurred.

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**FUELCELL ENERGY, INC.**

Notes to Consolidated Financial Statements

**For the Years Ended October 31, 2009, 2008, and 2007**

(Tabular amounts in thousands, except share and per share amounts)

As our fuel cell products are still in their early stages of development and market acceptance, we cannot reliably estimate the total costs to produce, install and operate our newest products through the end of the warranty period included in our product sales contracts. Therefore, actual costs incurred could differ materially from initial estimates and materially impact revenue recognition. We also have not historically provided for a loss reserve estimate on product or service contracts because such losses cannot be reasonably estimated. As our products achieve commercial market acceptance and we gain further operating experience, a reliable history of production and service costs and product life should enable management to reasonably estimate future costs to complete an individual product or service contract, and establish contract loss reserves, if necessary.

Revenues from 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-share 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.

*Service and Warranty Expense Recognition*

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs on products that have sufficient operating experience to allow for management to reasonably estimate warranty obligations. For newer products where we have limited operating experience, warranty costs are currently expensed as incurred. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects.

In addition to the standard product warranty of one year, we have contracted with certain customers to provide long-term service agreements ( LTSA ) for fuel cell power plants ranging from one to 13 years. Our standard LTSA term is five years. We provide for a reserve of LTSA costs if agreements are sold below our standard pricing. Pricing for LTSAs is based upon estimates of future costs, which given our products' early stage of development, could be materially different from actual expenses.

*Deferred Revenue, Royalty Income and Customer Deposits*

In February 2007, we entered into a 10-year manufacturing and distribution agreement with POSCO Power ( POSCO ). Under the terms of this agreement, POSCO will manufacture balance of plant ( BOP ) in South Korea using its design, procurement and manufacturing expertise. Under the terms of the agreement, we will receive a 4.1 percent royalty on sales of BOP made by POSCO, subject to minimum royalties.

In October 2009, we entered into a 10-year Stack Technology Transfer and License Agreement (the 2009 License Agreement ) with POSCO allowing it to produce fuel cell stack modules from cells and components provided by us. These fuel cell modules will be combined with BOP manufactured in South Korea to complete electricity-producing fuel cell power plants for sale in South Korea. The 2009 License Agreement provides for an ongoing royalty, initially set at 4.1 percent of the revenues generated from sales of fuel cell stack modules manufactured and sourced by POSCO.

In connection with the 2009 License Agreement, we received an upfront license fee of \$10.0 million. This amount has been deferred and will be recognized as revenue ratably over the term of the 2009 License Agreement.

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**FUELCELL ENERGY, INC.**

Notes to Consolidated Financial Statements

**For the Years Ended October 31, 2009, 2008, and 2007**

(Tabular amounts in thousands, except share and per share amounts)

In addition, we receive payments from customers upon the acceptance of a purchase order and when contractual milestones are reached. These payments may be deferred based on the nature of the payment and status of the specific project. Deferred revenue is recognized as revenue in accordance with our revenue recognition policies summarized above.

*Warrant Value Recognition*

Warrants were issued as sales incentives to certain of our business partners. These warrants vested if orders from our business partners exceeded stipulated levels. If warrants vested, or if management estimated that it was probable that warrants would vest, a proportional amount of the fair value of the warrants was capitalized and subsequently recorded as a sales discount when the related revenue was recognized. There were no material amounts charged to sales discounts for the years ended October 31, 2009, 2008 and 2007. As of October 31, 2009, there are no remaining warrants outstanding or available for issuance. Refer to Note 10 for additional information.

*Research and Development Costs*

We perform both customer-sponsored research and development projects based on contractual agreement with customers and company-sponsored research and development projects. Costs incurred for customer-sponsored projects include manufacturing and engineering labor, applicable overhead expenses, materials to build and test prototype units and other costs associated with customer-sponsored research and development contracts. These costs are recorded as cost of research and development contracts in the consolidated statements of operations.

Costs incurred for company-sponsored research and development projects consist primarily of labor, overhead, materials to build and test prototype units and consulting fees. These costs are recorded as research and development expenses in the consolidated statements of operations.

*Share-Based Compensation*

We account for stock options awarded to employees and non-employee directors under the fair value method of accounting using the Black-Scholes valuation model to estimate fair value at the grant date. The model requires us to make estimates and assumptions regarding the expected life of the option, the risk-free interest rate, the expected volatility of our common stock price and the expected dividend yield. The fair value of stock options is amortized to expense over the vesting period, generally four years. Refer to Note 13 for additional information.

*Income Taxes*

Income taxes are accounted for under the liability method. Deferred tax assets and liabilities are determined based on net operating loss ( NOL ) carryforwards, research and development credit carryforwards, and differences between financial reporting and income tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates and laws expected to be in effect when the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. A valuation allowance is recorded against deferred tax assets if it is unlikely that some or all of the deferred tax assets will be realized.

As of November 1, 2007, we adopted guidance for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not file a return in a particular jurisdiction). The company's financial statements reflect expected future tax consequences of such positions presuming the taxing authorities' full knowledge of the position and all relevant facts.

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*Concentrations*

We contract with a small number of customers for the sale of our products and for research and development contracts. For the fiscal years ended October 31, 2009, 2008 and 2007, our top two customers accounted for 80 percent, 62 percent and 45 percent, respectively, of our total annual consolidated revenue.

In 2009, POSCO increased its ownership interest in our Company from 5 percent to 13 percent. For the years ended October 31, 2009, 2008 and 2007, POSCO accounted for 64 percent, 46 percent and 13 percent of total revenues, respectively, and at October 31, 2009 and 2008, total accounts receivable from POSCO were \$17.1 million and \$11.7 million, respectively.

Revenue from the U.S. Government (primarily the Department of Energy) for funded research and development contracts accounted for 16 percent, 17 percent and 31 percent of total revenues for the fiscal years ended October 31, 2009, 2008 and 2007, respectively.

There can be no assurance that we will continue to achieve historical levels of sales of our products to our largest customers. Even though our customer base is expected to increase and our revenue streams to diversify, a substantial portion of net revenues could continue to depend on sales to a limited number of customers. Our agreements with these customers may be cancelled if we fail to meet certain product specifications or materially breach the agreement, and our customers may seek to renegotiate the terms of current agreements or renewals. The loss of, or a reduction in sales to, one or more of our larger customers could have a material adverse affect on our business, financial condition and results of operations.

*Derivatives*

We do not use derivatives for trading or speculative purposes. Derivative instruments consist of our warrants to purchase additional shares of common stock of Versa Power Systems, Inc. ( Versa ) and embedded derivatives in our Series 1 Preferred Shares. We account for these derivatives using the fair-value method with changes in the underlying fair value recorded to earnings. Refer to Notes 2 and 11 for additional information.

*Use of Estimates*

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates. Estimates are used in accounting for, among other things, revenue recognition, excess, slow-moving and obsolete inventories, product warranty costs, LTSA reserves, allowance for uncollectible receivables, depreciation and amortization, impairment of assets, taxes, and contingencies. Estimates and assumptions are reviewed periodically, and the effects of revisions are reflected in the consolidated financial statements in the period they are determined to be necessary.

*Comprehensive Loss*

Comprehensive loss includes net loss to common shareholders (as reported before preferred dividends) and foreign currency translation adjustments, which are included as a component of shareholders' equity in the consolidated balance sheets.

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*Foreign Currency Translation*

The translation of FuelCell Korea Ltd.'s financial statements results in translation gains or losses, which are recorded in accumulated other comprehensive loss within shareholders' equity.

Our Canadian subsidiary, FCE Ltd., is financially and operationally integrated and therefore the temporal method of translation of foreign currencies is followed. The functional currency is U.S. dollars. We are subject to foreign currency transaction gains and losses as certain invoices are denominated in Canadian dollars. We recognized a loss of \$0.2 million, a loss of \$0.3 million and a gain of \$53 thousand for the years ended October 31, 2009, 2008 and 2007, respectively. These amounts have been classified as interest and other income in the consolidated statements of operations.

*Subsequent Events*

We have evaluated subsequent events and transactions for potential recognition or disclosure in the financial statements through January 14, 2010. We are not aware of any significant events that occurred subsequent to the balance sheet date but prior to the filing of this Form 10-K with the SEC that would have a material impact on our consolidated financial statements.

*Liquidity*

We anticipate that our existing capital resources, together with anticipated revenues and cash flows, will be adequate to satisfy our financial requirements and agreements through at least the next 12 months. We are currently operating at a 30 MW run-rate and our current backlog is approximately 44 MW. Our future liquidity will be dependent on obtaining the order volumes and cost reductions on our fuel cell products necessary to achieve profitable operations. We may also raise capital through additional equity offerings; however, there can be no assurance that we will be able to obtain additional financing in the future. If we are unable to raise additional capital, our growth potential may be adversely affected and we may have to modify our plans.

*Recent Accounting Pronouncements*

In June 2009, the Financial Accounting Standard Board (FASB) issued new accounting guidance on the Accounting Standards Codification (Codification) and the hierarchy of generally accepted accounting principles (Accounting Standards Codification (ASC) 105-10). The Codification is now the single source of authoritative generally accepted accounting principles (GAAP) applied by nongovernmental entities and supersedes all existing FASB, American Institute of Certified Public Accountants, Emerging Issues Task Force and related literature. The Codification eliminates the previous U.S. GAAP hierarchy and establishes one level of authoritative GAAP. All other literature is considered non-authoritative. The Codification is not intended to change GAAP but rather reorganize divergent accounting literature into an accessible and user-friendly system. The Codification was effective for financial statements issued for interim and annual periods ending after September 15, 2009. We adopted the Codification as of October 31, 2009 and it impacted our disclosures by eliminating all references to pre-Codification standards, however there was no impact to our consolidated financial statements.

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In June 2009, the FASB issued accounting guidance (ASC 810) which requires a company to perform ongoing reassessment of whether it is the primary beneficiary of a variable interest entity ( VIE ). Specifically, the guidance modifies how a company determines when an entity that is insufficiently capitalized or is not controlled through voting (or similar rights) should be consolidated. The guidance clarifies that the determination of whether a company is required to consolidate a VIE is based on, among other things, an entity s purpose and design and a company s ability to direct the activities of the VIE that most significantly impact the VIE s economic performance. The guidance requires an ongoing reassessment of whether a company is the primary beneficiary of a VIE and enhanced disclosures of the company s involvement in VIEs and any significant changes in risk exposure due to that involvement. The guidance is effective for the first quarter of fiscal 2010 and we do not expect there will be a material impact on our consolidated financial statements.

In May 2009, the FASB issued accounting guidance for subsequent events (ASC 855-10) which incorporates the subsequent events guidance contained in the auditing standards literature into authoritative accounting literature. It also requires companies to disclose the date through which they have evaluated subsequent events and whether the date corresponds with the release of their financial statements. We adopted this guidance for the year ended October 31, 2009. The adoption of this guidance did not have a material effect on our consolidated financial statements.

In April 2009, the FASB issued accounting guidance for interim disclosures about financial instruments (ASC 825-10) to require disclosures about fair value of financial instruments in interim financial statements (ASC 270-10) as well as in annual financial statements. We adopted this guidance in the third quarter 2009. As the guidance requires only additional disclosures, the adoption did not have a material effect on our consolidated financial statements.

In April 2008, the FASB issued accounting guidance that amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset (ASC 350-10). In developing assumptions about renewal or extension options used to determine the useful life of an intangible asset, a company needs to consider its own historical experience adjusted for company-specific factors. In the absence of that experience, the company shall consider the assumptions that market participants would use about renewal or extension options. The new guidance will be effective in the first quarter of fiscal 2010. We currently do not have any intangible assets recorded on our consolidated balance sheets; therefore, the impact of the adoption of this guidance on our consolidated financial statements will be determined when and if we record or purchase (e.g. by acquisition) any definite-lived intangible assets.

In March 2008, the FASB issued accounting guidance that expands the disclosure requirements about an entity s derivative instruments and hedging activities (ASC 815-10). The guidance requires qualitative disclosures about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses on derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. We adopted this guidance during the second quarter of fiscal 2009. As the guidance requires only additional disclosures, the adoption did not have a material effect on our consolidated financial statements.

In December 2007, the FASB issued revised accounting guidance for business combinations (ASC 805-10) that requires an acquirer to measure the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree at their fair values on the acquisition date, with goodwill being the excess value over the net identifiable assets acquired. The guidance also requires that certain other assets and liabilities related to the acquisition such as contingencies and research and development, be recorded at fair value. The new guidance will be effective in the first quarter of fiscal 2010. The potential impact of this revised guidance on our consolidated financial statements will be based upon future business combinations, if any.



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In December 2007, the FASB issued new guidance on noncontrolling interests in consolidated financial statements (ASC 810-10). This guidance requires that a noncontrolling interest in a subsidiary be reported as equity in the consolidated financial statements. Consolidated net income should include the net income for both the parent and the noncontrolling interest with disclosure of both amounts in the consolidated statements of operations. The calculation of earnings per share will continue to be based on income amounts attributable to the parent. The new guidance will be effective in the first quarter of 2010. We currently do not expect the adoption of the revised guidance will have a material effect on our consolidated financial statements.

In February 2007, the FASB issued accounting guidance that allowed entities to measure most financial instruments at fair value if desired (ASC 825-10). The guidance may be applied on a contract by contract basis and is irrevocable once applied to those contracts. The guidance may be applied at the time of adoption for existing eligible items, or at initial recognition of eligible items. Those items measured at fair value must be shown separately on the balance sheet, and changes in fair value are reported in earnings. We have elected not to apply the fair value option to any of our existing financial instruments.

**Note 2. Equity investments**

Versa is one of our sub-contractors under the Department of Energy's (DOE) large-scale hybrid project to develop a coal-based, multi-megawatt solid oxide fuel cell (SOFC) based hybrid system. Versa is a private company founded in 2001 that is developing advanced SOFC systems for various stationary and mobile applications. We have a 39 percent ownership interest and account for Versa under the equity method of accounting. We recognize our share of the losses as loss from equity investments on the consolidated statements of operations.

In 2007, we loaned Versa \$2.0 million in the form of a convertible note (the 2007 Convertible Note) and in 2009, we loaned Versa \$0.6 million, also in the form of a convertible note (the 2009 Convertible Note) and together with the 2007 Convertible Note, the Convertible Notes). The 2007 Convertible Note matures May 2017 and the 2009 Convertible Note matures November 2018, unless certain prepayment events occur. In conjunction with the Convertible Notes, we received warrants for the right to purchase 3,108 shares of Versa common stock at a weighted average exercise price of \$167 per share. Our ownership percentage would increase to 44 percent if the Convertible Notes are converted into common stock.

We have determined that the above warrants represent derivatives subject to fair value accounting. The fair value is determined based on the Black-Scholes valuation model using historical stock price, volatility (based on a peer group since Versa's common stock is not publicly traded) and risk-free interest rate assumptions. The fair value of the warrants is included within investment and loan to affiliate on the consolidated balance sheets and changes in the fair value of the warrants are included in interest and other income on the consolidated statements of operations. The fair value of the warrants as of October 31, 2009 and 2008 was \$0.2 million and \$0.3 million, respectively. The change in the fair value of the warrants was not material to the consolidated financial statements for the years ended October 31, 2009, 2008 and 2007. The carrying value of our investment in and loans to Versa was \$10.1 million and \$10.4 million as of October 31, 2009 and 2008, respectively.



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**Note 3. Investments**

The following table summarizes the amortized cost basis and fair value of our investments in U.S. treasury securities at October 31, 2009 and 2008:

	Amortized cost	Gross unrealized gains	Gross unrealized (losses)	Fair value
<b>U.S. government obligations</b>				
At October 31, 2009	\$ 7,004	\$ 40	\$	\$ 7,044
At October 31, 2008	\$ 48,840	\$ 304	\$	\$ 49,144
			<b>2009</b>	<b>2008</b>
<b>Reported as:</b>				
Short-term investments			\$ 7,004	\$ 30,406
Long-term investments				18,434
Total			\$ 7,004	\$ 48,840

As of October 31, 2009, investment securities had maturity dates ranging from December 31, 2009 to April 30, 2010, and estimated yields ranging from 2.35 percent to 2.46 percent, with a weighted average yield of 2.38 percent.

**Note 4. Inventories**

The components of inventory at October 31, 2009 and October 31, 2008 consisted of the following:

	<b>2009</b>	<b>2008</b>
Raw materials	\$ 15,945	\$ 18,952
Work-in-process	9,488	5,571
Total	\$ 25,433	\$ 24,523

Raw materials consist mainly of various nickel powders and steels, various other components used in producing cell stacks and purchased components for BOP. Work-in-process inventory is comprised of material, labor, and overhead costs incurred to build fuel cell stacks, which are subcomponents of a power plant. Work in process also includes costs related to power plants in inventory which have not yet been dedicated to a particular commercial customer contract. From time to time, we capitalize costs related to a research and development contract if those costs are incurred ahead of a contractual milestone in order to properly match revenues and costs.

The above inventory amounts include a lower of cost or market adjustment of \$8.9 million and \$11.4 million at October 31, 2009 and 2008, respectively, to write down the carrying value of inventory to its estimated market value.

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**Note 5. Accounts Receivable**

Accounts receivable at October 31, 2009 and 2008 consisted of the following:

	<b>2009</b>	<b>2008</b>
U.S. Government:		
Amount billed	\$ 574	\$ 199
Unbilled recoverable costs	776	406
	1,350	605
Commercial Customers:		
Amount billed <sup>(1)</sup>	5,439	4,584
Unbilled recoverable costs	16,131	10,907
	21,570	15,491
	\$ 22,920	\$ 16,096

(1) Amounts billed as of October 31, 2008 include customer retainage provisions (amounts withheld until contract completion) of \$0.6 million, respectively. All retainage was paid by October 31, 2009.

We bill customers for power plant sales based on reaching certain milestones. We bill the U.S. government for research and development contracts based on actual costs incurred, typically in the month subsequent to incurring costs. Unbilled recoverable costs relate to revenue recognized on customer contracts that have not been billed. The amounts above are presented net of an allowance for doubtful accounts of \$19 thousand and \$51 thousand at October 31, 2009 and 2008, respectively.

**Note 6. Property, Plant and Equipment**

Property, plant and equipment at October 31, 2009 and 2008 consisted of the following:

	<b>2009</b>	<b>2008</b>	<b>Estimated Useful Life</b>
Land	\$ 524	\$ 524	
Building and improvements	6,851	6,720	10-26 years
Machinery, equipment and software	59,860	58,314	3-8 years
Furniture and fixtures	2,604	2,454	10 years
Power plants for use under PPAs	17,743	17,743	10 years
Construction in progress <sup>(1)</sup>	6,710	7,173	
	94,292	92,928	
Less, accumulated depreciation and amortization	(61,898)	(54,669)	
Total	\$ 32,394	\$ 38,259	

(1) Included in construction in progress are costs of \$0.8 million and \$0.7 million at October 31, 2009 and 2008, respectively, to build power plants that will service power purchase agreement contracts.

Depreciation expense was \$8.6 million, \$8.8 million and \$9.2 million for the years ended October 31, 2009, 2008 and 2007, respectively.

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**Note 7. Other Current Assets**

Other current assets at October 31, 2009 and October 31, 2008 consisted of the following:

	<b>2009</b>	<b>2008</b>
Advance payments to vendors <sup>(1)</sup>	\$ 3,362	\$ 3,830
Interest receivable	185	385
Receivable for state research and development tax credit	279	470
Insurance receivable for power plant damaged during shipping <sup>(2)</sup>	1,642	2,942
Prepaid expenses and other	1,031	1,325
<b>Total</b>	<b>\$ 6,499</b>	<b>\$ 8,952</b>

(1) Advance payments to vendors relate to inventory purchases. The amounts have been reduced by a lower of cost or market adjustment of \$0.6 million and \$0.9 million at October 31, 2009 and 2008, respectively.

(2) Amount at October 31, 2009 was recovered in full subsequent to October 31, 2009.

**Note 8. Accrued Liabilities**

Accrued liabilities at October 31, 2009 and 2008 consisted of the following:

	<b>2009</b>	<b>2008</b>
Accrued payroll and employee benefits	\$ 3,258	\$ 4,769
Accrued contract and operating costs <sup>(1)</sup>	3,690	1,455

Reserve for long-term service agreement costs	5,950	4,016
Accrued taxes and other	910	783
Total	\$ 13,808	\$ 11,023

(1) Includes \$2.2 million at October 31, 2009 potentially owed to customers related to contract performance.

#### Note 9. Debt

At October 31, 2009 and 2008, debt consisted of the following:

	2009	2008
Connecticut Development Authority Note	\$ 4,000	\$ 3,564
Connecticut Clean Energy Fund Note	650	595
Capitalized lease obligations	321	400
Total debt	4,971	4,559
Less current portion	(997)	(795)
Long-term debt	\$ 3,974	\$ 3,764

In April 2008, we entered into a 10-year loan agreement with the Connecticut Development Authority to finance equipment purchases associated with manufacturing capacity expansion allowing for a maximum borrowing of \$4.0 million. The stated interest rate is 5 percent and the loan is collateralized by the assets procured under this loan as well as \$4.0 million of additional machinery and equipment. Interest only payments are required through November 2009. Principal and interest payments are due commencing in December 2009 through May 2018.

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In April 2006, BFCP entered into a loan agreement with the Connecticut Clean Energy Fund for \$0.5 million, secured by assets of BFCP. Loan proceeds were designated for pre-development expenses associated with the development, construction and operation of a fuel cell generation facility in Bridgeport, Connecticut (the Project). Interest accrues monthly at an annual rate of 8.75 percent. Repayment of principal and any accrued and unpaid interest is required on the earliest occurrence of any of the following events: (a) twelve months after the commencement date of the commercial operation of the Project, (b) the date of consummation and closing of permanent institutional financing of the Project, (c) the date of consummation and closing of any sale of the Project and (d) the date upon which certain change in control events occur related to BFCP. We have not made any prepayments as of October 31, 2009. The outstanding balance on this loan was \$0.6 million, including \$0.1 million of accrued interest, as of October 31, 2009. This note is classified as currently payable as the timing of events that would result in repayment are not determinable. We lease computer equipment under a \$2.5 million master lease agreement. Lease payment terms are thirty-six months from the date of acceptance for leased equipment.

Aggregate annual principal payments under our loan agreements and capital lease obligations for the years subsequent to October 31, 2009 are as follows:

2010	\$	997
2011		278
2012		213
2013		196
2014		206
Thereafter		3,081
	\$	4,971

**Note 10. Shareholders' Equity****Common Stock**

During 2009, we issued a total of 15.6 million shares of our common stock. We sold 6.7 million shares in a registered direct offering for aggregate net proceeds of \$22.5 million and in connection with the execution of the 2009 License Agreement, POSCO purchased 7.0 million shares for aggregate net proceeds of \$25.0 million. We also sold 0.7 million shares on the open market to fund dividend payments on our outstanding preferred shares and issued 1.2 million shares under employee benefit plans.

**Warrants**

In 2005, in connection with an Amended Distribution Agreement, we issued warrants to Enbridge Inc. (Enbridge) to purchase up to an aggregate of 1,000,000 shares of our common stock at various exercise prices. The warrants vested on a graduated scale based on the volume (in total megawatts) and timing of sales orders generated by Enbridge. In July 2007, Enbridge placed qualifying orders resulting in the vesting of warrants to purchase 7,500 shares of our common stock at an exercise price of \$9.89. These vested warrants expired on October 31, 2009 as did any remaining unvested warrants issued to Enbridge as there were no qualifying sales orders placed during 2009. Accordingly, there are no warrants outstanding at October 31, 2009.

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**Note 11. Redeemable Preferred Stock**

***Redeemable Series B Preferred Stock***

We have 250,000 shares of our 5 percent Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000) ( Series B Preferred Stock ) authorized for issuance. At October 31, 2009 and 2008, there were 64,120 shares of Series B Preferred Stock issued and outstanding, with a carrying value of \$60.0 million. The shares of our Series B Preferred Stock and 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. The following is a summary of certain provisions of our Series B Preferred Stock.

*Ranking* Shares of 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 accumulate and are cumulative from the date of original issuance. Accumulated dividends on the Series B Preferred Stock do not bear interest.

The dividend rate is subject to upward adjustment as set forth in the Certificate of Designation if we fail to pay, or to set apart funds to pay, any quarterly dividend. The dividend rate 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 Stock (or the underlying common shares) under the Registration Rights Agreement.

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

The dividend on the Series B Preferred Stock may be paid 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. Dividends of \$3.2 million were paid in each of the years ended October 31, 2009 and 2008. There were no cumulative unpaid dividends at October 31, 2009.

*Liquidation* The Series B Preferred Stock stockholders are entitled to receive, in the event that we are liquidated, dissolved or wound up, whether voluntary or involuntary, \$1,000 per share plus all accumulated and unpaid dividends to the date of that liquidation, dissolution, or winding up ( Liquidation Preference ). Until the holders of Series B Preferred Stock receive their Liquidation Preference in full, no payment will be made on any junior shares, including shares of our common stock. After the Liquidation Preference is paid in full, holders of the Series B Preferred Stock will not be entitled to receive any further distribution of our assets. At October 31, 2009 and 2008, the Series B Preferred Stock had a Liquidation Preference of \$64.1 million.

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*Conversion Rights* Each Series B Preferred Stock share 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. If converted, holders of Series B Preferred Stock do not receive a cash payment for all accumulated and unpaid dividends; rather, all accumulated and unpaid dividends are cancelled.

Beginning after November 20, 2009 we may, at our option, cause shares of 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 percent of the then prevailing conversion price (\$11.75 at November 20, 2009) for 20 trading days during any consecutive 30 trading day period, as described in the Certificate of Designation.

If holders of 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 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 is to prevent dilution of the interests of the holders of the Series B Preferred Stock from 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.

*Redemption* We do not have the option to redeem the shares of Series B Preferred Stock. However, holders of the Series B Preferred Stock can require us to redeem all or part of their shares at a redemption price equal to the Liquidation Preference of the shares to be redeemed in the case of a fundamental change. A fundamental change will be deemed to have occurred if any of the following occurs:

- any person or group is or becomes the beneficial owner, directly or indirectly, of 50 percent 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;
- 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;



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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 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 percent 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 redeem their shares if:

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 percent of the conversion price of the shares of Series B Preferred Stock immediately before the fundamental change or announcement;

at least 90 percent of the consideration (excluding cash payments for fractional shares) and, in respect of dissenters appraisal rights, if 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 fundamental change event in the fourth bullet above, the transaction is affected solely to change our jurisdiction of incorporation.

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 percent 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.

*Voting Rights* Holders of Series B Preferred Stock currently have no voting rights; however, holders may receive certain voting rights, as described in the Certificate of Designation, if (1) dividends on any shares of Series B Preferred Stock, or any other class or series of stock ranking on a parity with the Series B Preferred Stock with respect to the payment of dividends, shall be in arrears for dividend periods, whether or not consecutive, for six calendar quarters or (2) we fail to pay the redemption price, plus accrued and unpaid dividends, if any, on the redemption date for shares of Series B Preferred Stock following a fundamental change.

So long as any shares of Series B Preferred Stock remain outstanding, we will not, without the consent of the holders of at least two-thirds of the shares of 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 the 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 the

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 Series B Preferred Stock or the holders thereof without the affirmative vote of not less than two-thirds of the issued and outstanding Series B Preferred Stock shares.

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***Series 1 Preferred Shares Redeemable minority interest***

In connection with our acquisition of Global Thermoelectric Inc. ( Global ) in November 2003, we acquired 1,000,000 Series 2 Preferred Shares ( Series 2 Preferred Shares ). With the sale of Global in May of 2004, the Series 2 Preferred Shares were cancelled, and replaced with substantially equivalent Series 1 Preferred Shares ( Series 1 Preferred Shares ) issued by FCE Ltd.

The fair value of the Series 2 Preferred Shares was determined at the acquisition date of Global using the income method. In applying this method, cash flows were estimated for the life of the securities and then discounted to present value to arrive at an indication of fair value. Amounts projected and then discounted included future dividend payments and conversion of the securities in 2020. Implicit in this valuation are certain assumptions regarding timing and payment of dividends and the ultimate conversion of the securities. Because the Series 1 Preferred Shares were issued as a replacement of the Series 2 Preferred Shares with equivalent terms and dividend requirements, the carrying value of the Series 1 Preferred Shares was set equal to the carrying value (original fair value plus any accretion of the fair value discount) of the Series 2 Preferred Shares at the date the Series 2 Preferred Shares were cancelled. The carrying value of the Series 1 Preferred Shares is adjusted quarterly to reflect dividend payments and accretion of the fair value discount. As of October 31, 2009 and 2008, the Series 1 Preferred Shares had a carrying value of \$15.0 million and \$13.3 million, respectively.

The significant terms of the Series 1 Preferred Shares include the following:

*Voting Rights* The holders of the Series 1 Preferred shares are not entitled to any voting rights or to receive notice of or to attend any meeting of the shareholders of FCE Ltd., but shall be entitled to receive notice of meetings of shareholders of FCE Ltd. called for the purpose of authorizing the dissolution or sale of its assets or a substantial part thereof.

*Dividends* Quarterly dividends of Cdn.\$312,500 (\$290,625 based on the October 31, 2009 exchange rate of Cdn.\$0.93 to U.S.\$1.00) 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 (\$465,000 based on an exchange rate of Cdn.\$0.93 to U.S.\$1.00) in cash or common stock annually to Enbridge, the sole holder of the Series 1 Preferred Shares, as long as Enbridge holds these shares. Interest accrues on cumulative unpaid dividends at an annual rate of 9 percent, compounded quarterly. All cumulative unpaid dividends must be paid by December 31, 2010. Using an exchange rate of Cdn.\$0.93 to U.S.\$1.00, cumulative unpaid dividends and accrued interest was \$9.8 million as of October 31, 2009. All cumulative unpaid dividends and accrued interest must be paid by December 31, 2010 and subsequently the required annual dividend payment increases to Cdn.\$1.25 million (\$1.16 million based on an exchange rate of Cdn.\$0.93 to U.S.\$1.00). We have guaranteed FCE Ltd.'s dividend obligations under the Series 1 Preferred Shares. During the year ended October 31, 2009, we paid cash dividends totaling Cdn.\$500,000.

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Dividend and accrued interest payments can be made in cash or common stock, at the option of FCE Ltd., and such shares issued may be unregistered. If FCE Ltd. elects to make such payments using shares of common stock, the number of common shares is determined by dividing the cash dividend obligation by 95 percent of the volume weighted average price at which the common shares have been traded on NASDAQ during the 20 consecutive trading days preceding the end of the calendar quarter for which such dividend in common shares is to be paid converted into Canadian dollars using the Bank of Canada's noon rate of exchange on the day of determination.

*Redemption* FCE Ltd. may redeem in whole or in part the Series 1 Preferred Shares if the trading price of our common stock for a calculated period is not less than 120 percent of the current conversion price plus all accrued and unpaid dividends. On and after July 31, 2010, the Series 1 Preferred Shares are redeemable by FCE Ltd. for Cdn.\$25 per share plus all unpaid dividends and accrued interest. Holders of the Series 1 Preferred Shares do not have any mandatory or conditional redemption rights.

*Liquidation or Dissolution* In the event of the liquidation or dissolution of FCE Ltd., the holders of Series 1 Preferred Shares will be entitled to receive Cdn.\$25 per share plus all unpaid dividends and accrued interest. We have guaranteed any liquidation obligations of FCE Ltd.

*Conversion Rights* A holder of Series 1 Preferred Shares has the right to convert such shares into fully paid and non-assessable shares of 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, at a price equal to 95 percent of the then current market price (in Cdn.\$) of shares of our common stock at the time of conversion.

The conversion rates set forth above shall be adjusted if we: (i) split our shares of common stock; (ii) pay a stock dividend; (iii) issue rights, options or other convertible securities to our common stockholders enabling them to acquire our common stock at a price less than 95 percent of the then-current price; or (iv) fix a record date to distribute to our common stockholders shares of any class of securities, indebtedness or assets.

***Derivative liability related to Series 1 Preferred Shares***

The conversion feature and variable dividend contained in the terms of the Series 1 Preferred Shares are not clearly and closely related to the characteristics of the Series 1 Preferred Shares. Accordingly, these features qualify as embedded derivative instruments and are required to be accounted for separately and recorded as derivative financial instruments at fair value.

The conversion feature is valued using a lattice model. This is a one-factor model used to project stochastic stock prices, while risk free rates, discount rates and foreign exchange rates are deterministic factors. Based on the pay-off profiles of the Series 1 Preferred Shares, it is assumed that we will exercise the call option to force conversion in 2020. Conversion after 2020 delivers a fixed pay-off to the investor, and is modeled as a fixed payment in 2020. The cumulative dividend is modeled as a quarterly cash dividend component (to satisfy minimum dividend payment requirement), and a one-time cumulative dividend payment in 2010. The cumulative dividend is compounded at a 2.45 percent quarterly rate. Call option strikes are adjusted for the cumulative dividend and the conversion ratio is adjusted by the accreted notional until 2010.



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The variable dividend is valued using a Monte Carlo simulation model. The embedded derivative is defined as the difference between the value of a normal 5 percent annual dividend payment stream, and the value of a stock price and foreign exchange rate linked dividend payment stream. Future stock prices and exchange rates are simulated following geometric Brownian motion to determine the stock/FX linked dividend going out to the year 2020, when the Series 1 Preferred Shares are assumed to be force converted.

The assumptions used in these valuation models include historical stock price volatility, risk-free interest rate and a credit spread based on the yield indexes of technology high yield bonds, foreign exchange volatility as the security is denominated in Canadian dollars, and the closing price of our common stock. The aggregate fair value of these derivatives included within long-term debt and other liabilities on the consolidated balance sheets as of October 31, 2009 and 2008 was \$0.5 million and \$0.3 million, respectively.

**Note 12. Segment Information**

We are engaged in the development, design, production and sale of high temperature fuel cells for clean electric power generation. Critical to the success of our business is, among other things, our research and development efforts, both through customer-sponsored projects and company-sponsored projects. Management considers our research and development activities and the production and sale of our fuel cell products as one activity. Accordingly, we have identified one business segment: fuel cell power plant production and research.

Revenues, by geographic location (based on the customer's ordering location) for the years ended October 31, 2009, 2008 and 2007 was as follows:

	2009	2008	2007
South Korea	\$ 56,100	\$ 46,160	\$ 6,444
United States	30,450	50,705	31,687
Canada	74	159	3,587
Germany	991	2,856	5,153
Japan	401	855	1,363
Total	\$ 88,016	\$ 100,735	\$ 48,234

**Note 13. Benefit Plans**

We have shareholder approved equity incentive plans, a shareholder approved Section 423 Stock Purchase Plan (the ESPP ) and an employee tax-deferred savings plan, which are described in more detail below.

**Equity Incentive Plans**

The Board adopted the 1998 and 2006 Equity Incentive Plans (collectively, the Equity Plans ). Pursuant to the Equity Plans, 8.5 million shares of common stock were reserved for issuance. The Board is authorized to grant incentive stock options, nonqualified stock options, restricted stock awards ( RSAs ) and stock appreciation rights ( SARs ) to our officers, key employees and non-employee directors. Stock options, RSAs and SARs have restrictions as to transferability. Stock option exercise prices are fixed by the Board but shall not be less than the fair market value of our common stock on the date of the grant. SARs may be granted in conjunction with stock options. Stock options generally vest ratably over four years and expire 10 years from the date of grant. As of October 31, 2009, there were 231,163 shares available for grant. There were no SARs outstanding at October 31, 2009 or 2008.

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We account for stock options awarded to employees and non-employee directors under the fair value method. The fair value of stock options is estimated on the grant date using the Black-Scholes option valuation model and the following weighted-average assumptions:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Expected life (in years)	6.8	6.7	6.6
Risk-free interest rate	2.3%	3.2%	4.5%
Volatility	72.4%	64.0%	60.8%
Dividend yield	0%	0%	0%

The expected life is the period over which our employees are expected to hold the options and is based on historical data for similar grants. The risk free interest rate is based on the expected U.S. Treasury rate over the expected life. Expected volatility is based on the historical volatility of our stock. For fiscal year 2007, we calculated expected volatility based on a combination of the historical volatility of our stock and the implied volatility from traded options. Dividend yield is based on our expected dividend payments over the expected life.

Share-based compensation was reflected in the consolidated statements of operations as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Cost of product sales and revenues	\$ 1,029	\$ 1,004	\$ 714
Cost of research and development contracts	188	235	297
General and administrative expense	2,802	3,287	3,030
Research and development expense	780	940	1,085
Total share-based compensation	\$ 4,799	\$ 5,466	\$ 5,126

The following table summarizes our stock option activity for the year ended October 31, 2009:

	<b>Number of options</b>	<b>Weighted average option price (\$)</b>
Outstanding at October 31, 2008	5,967,213	10.99
Granted	213,152	2.89
Exercised	(106,000)	1.63
Cancelled	(333,660)	11.08
Outstanding at October 31, 2009	5,740,705	10.86

The weighted average grant-date fair value per share for options granted during the periods ended October 31, 2009, 2008 and 2007 was \$1.97, \$5.44 and \$4.62, respectively. The total intrinsic value of options exercised during the periods ended October 31, 2009, 2008 and 2007 was \$0.1 million, \$2.2 million and \$7.3 million, respectively.

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The following table summarizes information about stock options outstanding and exercisable at October 31, 2009:

Range of exercise prices	Number outstanding	Options Outstanding		Options Exercisable	
		Weighted average remaining contractual life	Weighted average exercise price (\$)	Number exercisable	Weighted average exercise price (\$)
\$0.27 \$5.10	211,952	9.4	2.89	154,759	2.85
\$5.11 \$9.92	3,306,512	6.5	7.94	2,127,212	7.83
\$9.93 \$14.74	1,496,623	4.5	12.19	1,345,298	12.38
\$14.75 \$19.56	262,618	1.5	16.82	262,618	16.82
\$19.57 \$24.39	217,000	1.5	23.01	217,000	23.01
\$24.40 \$29.21	25,000	1.2	26.22	25,000	26.22
\$29.22 \$34.03	157,000	1.0	29.91	157,000	29.91
\$34.04 \$48.49	64,000	0.9	38.50	64,000	38.50
	5,740,705	5.4	10.86	4,352,887	11.71

The intrinsic value of options outstanding and exercisable at October 31, 2009 was \$0.1 million.

During fiscal year 2009, we granted 664,612 RSAs to employees. RSA expense is based on the fair value of the award at the date of grant and is amortized over the vesting period, generally four years. The weighted average grant-date fair value of RSAs was \$2.87 per share. During the year, 71,350 RSAs were cancelled. At October 31, 2009, there were 593,262 outstanding RSAs with an average remaining life of 1.9 years and an aggregate intrinsic value of \$2.0 million.

As of October 31, 2009, total compensation cost related to nonvested stock options and RSAs not yet recognized was \$4.6 million and \$1.4 million, respectively, which is expected to be recognized over the next 1.9 and 3.5 years, respectively, on a weighted-average basis.

Stock may be issued to employees as part of the annual incentive bonus. During fiscal 2009, 2008 and 2007, we issued 355,253, 140,271 and 133,419 shares of common stock, respectively, in lieu of cash bonuses with values of \$1.1 million, \$1.1 million and \$0.9 million, respectively, to fulfill the accrued obligation from each of the prior fiscal years.

During fiscal 2008 and 2007, we issued 9,387 and 8,391 shares of common stock, respectively, to directors as compensation in lieu of cash. No shares were issued to directors as compensation in 2009.

**Employee Stock Purchase Plan**

There were 900,000 shares of common stock reserved for issuance under the ESPP. Under the ESPP, eligible employees have the right to purchase shares of common stock at the lesser of (i) 85 percent of the last reported sale price of our common stock on the first business day of the offering period, or (ii) 85 percent of the last reported sale price of the common stock on the last business day of the offering period, in either case rounded up to avoid impermissible trading fractions. Shares issued pursuant to the ESPP contain a legend restricting the transfer or sale of such common stock for a period of six months after the date of purchase. As of October 31, 2009, there were 207,207 shares of common stock available for issuance under the ESPP.





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ESPP activity for the year ended October 31, 2009 was as follows:

	<b>Number of shares</b>
Balance at October 31, 2008	267,217
Issued @ \$4.06	(24,834)
Issued @ \$2.69	(35,176)
 Balance at October 31, 2009	 207,207

The fair value of shares under the ESPP was determined at the grant date using the Black-Scholes option-pricing model with the following weighted average assumptions:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Expected life (in years)	.5	.5	.5
Risk-free interest rate	0.7%	2.1%	5.06%
Volatility	99.0%	68.9%	46.7%
Dividend yield	0%	0%	0%

The weighted-average fair value of shares issued under the ESPP during fiscal 2009 was \$1.50 per share.

**Employee Tax-Deferred Savings Plans**

We offer a 401(k) plan (the Plan) to all full time employees that provides for tax-deferred salary deductions for eligible employees (beginning the first month following an employee's hire date). Employees may choose to make voluntary contributions of their annual compensation to the Plan, limited to an annual maximum amount as set periodically by the Internal Revenue Service. We provide discretionary matching contributions equal to 100 percent of the employee's contribution amount, up to a maximum of 6 percent of the employee's annual salary. Participants are required to contribute a minimum of 3 percent in order to be eligible to participate and receive the matching contribution. Matching contributions begin vesting after one year and are fully vested after five years. Employee contributions are fully vested when made. Under the Plan, there is no option available to the employee to receive or purchase our common stock. In February 2009, we suspended our matching contribution. Contributions under the Plan were \$0.5 million, \$1.7 million and \$1.3 million for the fiscal year ended October 31, 2009, 2008 and 2007, respectively.

**Note 14. Income Taxes**

The components of loss from continuing operations before income taxes for the fiscal years ended October 31, 2009, 2008, and 2007 were as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
U.S.	\$ (66,582)	\$ (91,500)	\$ (66,988)
Foreign	(2,092)	(1,857)	(1,686)
 Loss before income taxes	 \$ (68,674)	 \$ (93,357)	 \$ (68,674)

There was no current or deferred federal income tax expense (benefit) for the years ended October 31, 2009, 2008 and 2007. Franchise tax expense, which is included in administrative and selling expenses, was \$0.2 million, \$0.2 million and \$0.4 million for the years ended October 31, 2009, 2008 and 2007, respectively.



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The reconciliation of the federal statutory income tax rate to our effective income tax rate for the years ended October 31, 2009, 2008 and 2007 was as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Statutory federal income tax rate	(34.0)%	(34.0)%	(34.0)%
State taxes net of Federal benefit	(1.6)%	(3.4)%	(4.8)%
Net operating loss true-up	0.5%	(1.3)%	
Nondeductible expenditures	1.7%	1.4%	2.0%
Change in State tax rate	12.8%		
Other, net	0.1%	0.7%	0.8%
Valuation allowance	20.5%	36.6%	36.0%
Effective income tax rate	0.0%	0.0%	0.0%

Our deferred tax assets and liabilities consisted of the following at October 31, 2009 and 2008:

	<b>2009</b>	<b>2008</b>
Deferred tax assets:		
Compensation and benefit accruals	\$ 3,665	\$ 3,689
Bad debt and other reserves	2,444	1,655
Capital loss and tax credit carryforwards	5,456	4,754
Investment in Versa	2,305	2,138
Net operating losses	175,363	166,555
Deferred license revenue	3,646	
Lower of cost or market inventory reserves	3,635	5,001
Gross deferred tax assets:	196,514	183,792
Valuation allowance	(194,087)	(180,507)
Deferred tax assets after valuation allowance	2,427	3,285
Deferred tax liability:		
Investment in partnerships	(509)	(547)
Accumulated depreciation	(1,918)	(2,738)
Gross deferred tax liability	(2,427)	(3,285)
Net deferred tax assets	\$	\$

We continually evaluate our deferred tax assets as to whether it is more likely than not that the deferred tax assets will be realized. In assessing the realizability of our deferred tax assets, management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies. Based on the projections for future taxable income over the periods in which the deferred tax assets are realizable, management believes that significant

uncertainty exists surrounding the recoverability of the deferred tax assets. As a result, we recorded a full valuation allowance against our net deferred tax assets. Approximately \$4.3 million of the valuation allowance will reduce additional paid in capital upon subsequent recognition of any related tax benefits.

At October 31, 2009, we had federal and state NOL carryforwards of \$497 million and \$341 million, respectively, for which a portion of the NOL has not been recognized in connection with share-based compensation. The Federal NOLs expire in varying amounts from 2020 through 2029 while state NOLs expire in varying amounts from 2011 through 2029. Additionally, we had \$8.1 million of state tax credits available, of which \$1.0 million expires in 2018. The remaining credits do not expire.

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Certain transactions involving the Company's beneficial ownership occurred in fiscal 2009 and prior years, which could have resulted in a stock ownership change for purposes of Section 382 of the Internal Revenue Code of 1986, as amended. We have determined that there was no ownership change as of the end of our 2009 fiscal year under Section 382. We have completed a detailed Section 382 study to determine if any of the NOLs and credits generated will be subject to limitation for fiscal 2009. Consequently, there have been no material ownership percentage changes and as a result, there isn't any impact to our consolidated statement of operations.

As discussed in Note 1, we adopted guidance for how a company should recognize, measure, present, and disclose in its financial statements uncertain tax positions that the company has taken or expects to take on a tax return (including a decision whether to file or not file a return in a particular jurisdiction). There was no cumulative effect on retained earnings from the adoption of this guidance, although NOL carryforwards and the related valuation allowance were adjusted by \$15.7 million.

The liability for unrecognized tax benefits at October 31, 2009 and 2008 was \$15.7 million. This amount is directly associated with a tax position taken in a year in which federal and state NOL carryforwards were generated. Accordingly, the amount of unrecognized tax benefit has been presented as a reduction in the reported amounts of our federal and state NOL carryforwards. It is our policy to record interest and penalties on unrecognized tax benefits as income taxes; however, because of our significant NOLs, no provision for interest or penalties has been recorded.

We file income tax returns in the U.S. and various states, primarily Connecticut and California. We are open to examination by the Internal Revenue Service and various states in which we file for fiscal years 1998 to the present. We are currently not under any income tax examinations.

**Note 15. Earnings Per Share**

Basic earnings (loss) per common share (EPS) are generally calculated as income (loss) available to common shareholders divided by the weighted average number of common shares outstanding. Diluted EPS is generally calculated as income (loss) available to common shareholders divided by the weighted average number of common shares outstanding plus the dilutive effect of common share equivalents. The calculation of basic and diluted EPS for the years ended October 31, 2009, 2008 and 2007 was as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Numerator			
Net loss	\$ (68,674)	\$ (93,357)	\$ (68,674)
Preferred stock dividend	(3,208)	(3,208)	(3,208)
Net loss to common shareholders	\$ (71,882)	\$ (96,565)	\$ (71,882)
Denominator			
Weighted average basic common shares	72,392,928	68,570,689	61,990,555
Effect of dilutive securities <sup>(1)</sup>			
Weighted average diluted common shares	72,392,928	68,570,689	61,990,555
Basic earnings per share	\$ (0.99)	\$ (1.41)	\$ (1.16)
Diluted earnings per share <sup>(1)</sup>	\$ (0.99)	\$ (1.41)	\$ (1.16)

- (1) Due to the net loss to common shareholders in each of the years presented above, diluted earnings per share was computed without consideration to potentially dilutive instruments as their inclusion would have been antidilutive. Potentially dilutive instruments include stock options, warrants and convertible preferred stock. At October 31, 2009, 2008 and 2007, there were options to purchase 5.7 million, 6.0 million and 5.3 million shares of common stock, respectively. There were no outstanding warrants as of October 31, 2009, and as of October 31, 2008 and 2007, there were outstanding warrants to purchase 500,000 and 800,000 shares of common

stock,  
respectively.  
See Note 11 for  
further  
information on  
preferred stock.



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**Note 16. Commitments and Contingencies*****Lease agreements***

In December 2006, we entered into a master lease agreement that allows for the lease of computer equipment up to an aggregate cost of \$2.5 million. As of October 31, 2009, we had capital lease obligations of \$0.3 million. Lease payment terms are thirty six months from the date of lease.

We also lease certain computer and office equipment, and manufacturing facilities in Torrington, and Danbury, Connecticut under operating leases expiring on various dates through 2015. Rent expense was \$1.4 million, \$1.3 million and \$1.1 million for the fiscal years ended October 2009, 2008 and 2007, respectively.

Non-cancelable minimum payments applicable to operating and capital leases as of October 31, 2009 were as follows:

	Operating Leases	Capital Leases
2010	\$ 861	\$ 192
2011	766	102
2012	739	27
2012	730	
2014	738	
Thereafter	523	
	\$ 4,357	\$ 321

***Service and warranty agreements***

Under the provisions of our LTSAs, we provide services to maintain, monitor, and repair customer power plants to meet minimum operating levels. Should the power plant not meet the minimum operating levels, we may be required to replace the fuel cell stack with a new or used stack. Our contractual liability under LTSAs is limited to amount of service fees payable under the contract. We have incurred and expect to continue to incur costs in excess of revenues in order to maintain customer power plants under our LTSAs. The revenue and cost of our LTSAs in the fiscal years ended October 31, 2009, 2008 and 2007, were as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Revenue	\$ 5,015	\$ 4,222	\$ 3,338
Costs	(19,386)	(24,151)	(13,303)
Costs in excess of revenue	\$ (14,371)	\$ (19,929)	\$ (9,965)

In fiscal 2008, our five-year fuel cell stack went into production, extending the expected life by two years. Service agreements related to power plants that have the five-year stack design are not expected to require a stack change to continue to meet minimum operating levels although we have limited operating experience with these products. Power plants that do not have the new design may require a stack replacement and we expect to continue to incur costs for stack changes as the older three-year stacks reach end of life.

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**Power purchase agreements**

Under the terms of our PPAs, 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 customers' current and future electricity pricing available from the grid. 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. The assets of these PPA entities, including fuel cell power plants, are carried at fair value based on our estimates of future revenues and expenses. Should actual results differ from our estimates, our results of operations could be negatively impacted. 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.

**Other**

We are involved in legal proceedings, claims and litigation arising out of the ordinary conduct of our business. Although we cannot assure the outcome, management presently believes that the result of such legal proceedings, either individually, or in the aggregate, will not have a material adverse effect on our consolidated financial statements, and no material amounts have been accrued in our consolidated financial statements with respect to these matters.

**Note 17. Supplemental Cash Flow Information**

The following represents supplemental cash flow information:

	<b>Year Ended October 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Cash interest paid	\$ 264	\$ 101	\$ 84
Supplemental disclosure of non-cash investing and financing activities:			
Common stock issued for employee annual incentive bonus	1,076	1,050	942
Write-off of assets resulting from the sale of a power plant to Sierra Nevada Brewing Co. <sup>(1)</sup>			(3,943)

(1) In December 2006, we completed the sale of the 1 MW power plant that had been operating under a power purchase agreement to the Sierra Nevada Brewing Co. The net book value of the asset of

\$3.9 million, which was recorded in property, plant and equipment as of October 31, 2006, was written-off and charged to cost of product sales and revenues upon the sale of the asset. In addition, the buyer assumed certain incentive funding liabilities resulting in a \$2.2 million decrease in deferred revenue liabilities and a corresponding credit to cost of product sales and revenues. Net cash proceeds from this transaction were \$1.8 million, which is included within operating activities on the consolidated statements of cash flows.

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## Notes to Consolidated Financial Statements

**For the Years Ended October 31, 2009, 2008, and 2007**

(Tabular amounts in thousands, except share and per share amounts)

**Note 18. Quarterly Information (Unaudited)**

Selected unaudited financial data for each quarter of fiscal years 2009 and 2008 is presented below. We believe that the information reflects all normal recurring adjustments necessary for a fair presentation of the information for the periods presented.

	<b>First Quarter</b>	<b>Second Quarter</b>	<b>Third Quarter</b>	<b>Fourth Quarter</b>	<b>Full Year</b>
<b>Year ended October 31, 2009:</b>					
Revenues	\$ 21,723	\$ 22,864	\$ 23,017	\$ 20,412	\$ 88,016
Loss from operations	(19,435)	(18,395)	(14,487)	(14,048)	(66,365)
Net loss	(19,919)	(19,080)	(14,915)	(14,760)	(68,674)
Preferred stock dividends	(802)	(802)	(802)	(802)	(3,208)
Net loss to common shareholders	(20,721)	(19,882)	(15,717)	(15,562)	(71,882)
Net loss to common shareholders per basic and diluted common share <sup>(1)</sup>	\$ (0.30)	\$ (0.29)	\$ (0.21)	\$ (0.20)	\$ (0.99)
<b>Year ended October 31, 2008:</b>					
Revenues	\$ 15,019	\$ 31,643	\$ 27,904	\$ 26,169	\$ 100,735
Loss from operations	(19,128)	(24,704)	(26,146)	(22,823)	(92,801)
Net loss	(18,916)	(24,977)	(25,980)	(23,484)	(93,357)
Preferred stock dividends	(802)	(802)	(802)	(802)	(3,208)
Net loss to common shareholders	(19,718)	(25,779)	(26,782)	(24,286)	(96,565)
Net loss to common shareholders per basic and diluted common share <sup>(1)</sup>	\$ (0.29)	\$ (0.38)	\$ (0.39)	\$ (0.35)	\$ (1.41)

(1) The full year net loss to common shareholders basic and diluted share may not equal the sum of the quarters due to weighting of outstanding shares.

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**Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**Item 9A. CONTROLS AND PROCEDURES**

**Disclosure Controls and Procedures**

The Company maintains disclosure controls and procedures, which are designed to provide reasonable assurance that information required to be disclosed in the Company's periodic SEC reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to its principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based on that evaluation, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the Company's periodic SEC reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to its principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

**Management's Annual Report on Internal Control Over Financial Reporting**

We, as members of management of FuelCell Energy, Inc., and its subsidiaries (the Company), are responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;

- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles of the United States of America, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and

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Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Under the supervision and with the participation of management, including our principal executive and financial officers, we assessed the Company's internal control over financial reporting as of October 31, 2009, based on criteria for effective internal control over financial reporting established in *Internal Control - Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission ( COSO ). Based on this assessment, we have concluded that the Company maintained effective internal control over financial reporting as of October 31, 2009 based on the specified criteria.

**Changes In Internal Control Over Financial Reporting**

There have been no changes in the Company's internal controls over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. OTHER INFORMATION**

None.

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**PART III**

**Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Information required under this Item is incorporated by reference to the Company's 2010 Proxy Statement to be filed with the SEC within 120 days from fiscal year end.

**Item 11. EXECUTIVE COMPENSATION**

Information required under this Item is incorporated by reference to the Company's 2010 Proxy Statement to be filed with the SEC within 120 days from fiscal year end.

**Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

Information required under this Item is incorporated by reference to the Company's 2010 Proxy Statement to be filed with the SEC within 120 days from fiscal year end.

**Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

Information required under this Item is incorporated by reference to the Company's 2010 Proxy Statement to be filed with the SEC within 120 days from fiscal year end.

**Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

Information required under this Item is incorporated by reference to the Company's 2010 Proxy Statement to be filed with the SEC within 120 days from fiscal year end.

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**PART IV**

**Item 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

The following documents are filed as part of this report:

1. Financial Statements See Index to Consolidated Financial Statements at Item 8 of the Annual Report on Form 10-K.
2. Financial Statement Schedules Supplemental schedules are not provided because of the absence of conditions under which they are required or because the required information is given in the financial statements or notes thereto
3. Exhibits The following exhibits are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K.

**EXHIBITS TO THE 10-K**

<b>Exhibit No.</b>	<b>Description</b>
3.1	Certificate of Incorporation of the Registrant, as amended, July 12, 1999 (incorporated by reference to exhibit of the same number contained in the Company's Form 8-K dated September 21, 1999)
3.1.1	Certificate of Amendment of the Certificate of Incorporation of the Registrant, dated October 31, 2003 (incorporated by reference to exhibit of the same number contained in the Company's Form 8-K dated November 4, 2003)
3.2	Restated By-Laws of the Registrant, dated July 13, 1999 (incorporated by reference to exhibit of the same number contained in the Company's Form 8-K dated September 21, 1999)
4	Specimen of Common Share Certificate (incorporated by reference to exhibit of the same number contained in the Company's Annual Report on Form 10K/A for fiscal year ended October 31, 1999)
4.1	Securities Purchase Agreement dated as of February 7, 2007, by and between FuelCell Energy, Inc. and POSCO Power (incorporated by reference to exhibit of the same number contained in the Company's Form 8-K dated February 20, 2007)
4.2	Schedule A to Articles of Amendment of FuelCell Energy, Ltd., setting forth the rights, privileges, restrictions and conditions of Class A Cumulative Redeemable Exchangeable Preferred Shares (incorporated by reference to exhibit of the same number contained in the Company's Form 10-Q for the period ended January 31, 2009)
4.3	Certificate of Designation for the 5% Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000) (incorporated by reference to Exhibit 3.1 contained in the Company's Form 8-K, dated November 22, 2004)
4.4	Securities Purchase Agreement dated as of June 9, 2009, by and between FuelCell Energy, Inc. and POSCO Power (incorporated by reference to exhibit 4.01 contained in the Company's Form 8-K, dated November 2, 2009)
10.1	Alliance Agreement between FuelCell Energy, Inc. and POSCO Power, dated as of February 7, 2007 (incorporated by reference to exhibit of the same number contained in the Company's Form 10-Q/A for the period ended January 31, 2009)



- 10.2 Technology Transfer, License and Distribution Agreement between FuelCell Energy, Inc. and POSCO Power, dated as of February 7, 2007 (incorporated by reference to exhibit of the same number contained in the Company's Form 10-Q/A for the period ended January 31, 2009)

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**EXHIBITS TO THE 10-K**

<b>Exhibit No.</b>	<b>Description</b>
10.3	Loan agreement, dated April 29, 2008, between the Company and the Connecticut Development Authority (incorporated by reference to exhibit of the same number contained in the Company s Form 10-Q for the period ended January 31, 2009)
10.4	Stack Technology Transfer and License Agreement dated as of October 27, 2009, by and between FuelCell Energy, Inc. and POSCO Power (incorporated by reference to exhibit 10.1 of the Company s Form 8-K, dated November 2, 2009)
10.5	Contract for the Supply of DFC Modules and DFC Components dated as of June 9, 2009, by and between FuelCell Energy, Inc. and POSCO Power (incorporated by reference to exhibit 10.2 of the Company s Form 8-K, dated November 2, 2009)
10.21	*FuelCell Energy, Inc. 1988 Stock Option Plan (incorporated by reference to exhibit of the same number contained in the Company s Amendment No. 1 to its Registration Statement on Form S-1 (File No. 33-47233) dated June 1, 1992)
10.36	*The FuelCell Energy, Inc. Section 423 Stock Purchase Plan (incorporated by reference to exhibit of the same number contained in the Company s 10-KSB for fiscal year ended October 31, 1994 dated January 18, 1995)
10.41	*Amendment No. 2 to the FuelCell Energy, Inc. Section 423 Stock Purchase Plan (incorporated by reference to exhibit of the same number contained in the Company s 10-Q for the period ended April 30, 1996 dated June 13, 1996)
10.42	*Amendments to the FuelCell Energy, Inc. 1988 Stock Option Plan (incorporated by reference to exhibit of the same number contained in the Company s 10-Q for the period ended April 30, 1996 dated June 13, 1996)
10.48	*Employment Agreement between FuelCell Energy, Inc. and the Chief Financial Officer, Treasurer and Secretary, dated October 5, 1998 (incorporated by reference to exhibit of the same number contained in the Company s 10-K for the fiscal year ended October 31, 1998)
10.54	*The FuelCell Energy, Inc. 1998 Equity Incentive Plan (incorporated by reference to exhibit of the same number contained in the Company s 10-Q for the period ended July 31, 1998)
10.55	Lease agreement, dated March 8, 2000, between the Company and Technology Park Associates, L.L.C. (incorporated by reference to exhibit of the same number contained in the Company s 10-Q for the period ended April 30, 2000)
10.56	Security agreement, dated June 30, 2000, between the Company and the Connecticut Development Authority (incorporated by reference to exhibit of the same number contained in the Company s 10-Q for the period ended July 31, 2000)
10.57	Loan agreement, dated June 30, 2000, between the Company and the Connecticut Development Authority (incorporated by reference to exhibit of the same number contained in the Company s

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10-Q for the period ended July 31, 2000)

- 10.60 \*Employment Agreement, dated January 12, 2006, between R. Daniel Brdar (incorporated by reference to exhibit of the same number contained in the Company s 8-K dated January 17, 2006)
- 14 Code of Ethics applicable to the Company s principal executive officer, principal financial officer and principal accounting officer. (incorporated by reference to exhibit of the same number contained in the Company s 10-K for the year ended October 31, 2003)
- 21 Subsidiaries of the Registrant
- 23.1 Consent of Independent Registered Public Accounting Firm

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**EXHIBITS TO THE 10-K**

<b>Exhibit No.</b>	<b>Description</b>
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes Oxley Act of 2002
* Management Contract or Compensatory Plan or Arrangement	
** Confidential Treatment has been granted for portions of this document	

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**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on January 14, 2010.

**FUELCELL ENERGY, INC.**

/s/ R. Daniel Brdar

R. Daniel Brdar  
Chairman, President and  
Chief Executive Officer

Dated: January 14, 2010

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<b>Signature</b>	<b>Capacity</b>	<b>Date</b>
/s/ R. Daniel Brdar		
R. Daniel Brdar	Chairman, President, and Chief Executive Officer (Principal Executive Officer)	January 14, 2010
/s/ Joseph G. Mahler		
Joseph G. Mahler	Senior Vice President, Chief Financial Officer, Corporate Secretary and Treasurer (Principal Accounting and Financial Officer)	January 14, 2010
/s/ Richard A. Bromley		
Richard A. Bromley	Director	January 11, 2010
/s/ Glenn H. Epstein		
Glenn H. Epstein	Director	January 10, 2010
/s/ James H. England		
James H. England	Director	January 11, 2010

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<b>Signature</b>	<b>Capacity</b>	<b>Date</b>
/s/ James D. Gerson James D. Gerson	Director	January 13, 2010
/s/ Thomas L. Kempner Thomas L. Kempner	Director	January 11, 2010
/s/ William A. Lawson William A. Lawson	Director	January 9, 2010
/s/ George K. Petty George K. Petty	Director	January 11, 2010
/s/ John A. Rolls John A. Rolls	Director	January 13, 2010
/s/ Togo Dennis West Jr. Togo Dennis West Jr.	Director	January 12, 2010

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**INDEX OF EXHIBITS**

Exhibit 21	Subsidiaries of the Registrant
Exhibit 23.1	Consent of Independent Registered Public Accounting Firm
Exhibit 31.1	CEO Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
Exhibit 31.2	CFO Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
Exhibit 32.1	CEO Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
Exhibit 32.2	CFO Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002