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

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

REGISTRATION NO. 333-122216

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

AMENDMENT NO. 1 TO FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

FUELCELL ENERGY, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

3629

(Primary Standard Industrial Classification Code Number

06-0853042

(I.R.S. Employer Identification Number)

3 Great Pasture Road Danbury, Connecticut 06813 (203) 825-6000 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Jerry D. Leitman President FuelCell Energy, Inc. 3 Great Pasture Road Danbury, Connecticut 06813 (203) 825-6000 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies of All Communications to:

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

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

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

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

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

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

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

	То Ве	Maximum Offering	88 8 8	Amount of Registration Fee		
Common Stock	1,800,000	\$8.90	\$16,020,000	\$1,885.55 ⁽²⁾		

CALCULATION OF REGISTRATION FEE

⁽¹⁾ Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933 based upon the average of the high and low prices of the common stock of the Registrant as reported by the Nasdaq National Market on January 19, 2005.

⁽²⁾ Previously paid.

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

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

SUBJECT TO COMPLETION, DATED MARCH [_], 2005

PROSPECTUS

[LOGO]

1,800,000 Shares of Common Stock

FuelCell Energy, Inc. is filing this prospectus in connection with:

 \cdot our issuance of up to 300,000 shares of our common stock to certain of our employees as partial payment of annual bonuses earned with respect to our fiscal year ended October 31, 2004 and future periods; and

• our offer and sale of up to 1,500,000 shares of our common stock, the proceeds of which will be used to pay dividends to holders of our 5% Series B Cumulative Convertible Perpetual Preferred Stock ("Series B preferred stock") for each of the eight quarterly periods ending on May 15, August 15 and November 15, 2005, February 15, May 15, August 15 and November 15, 2006, and February 15, 2007.

We will offer and sell, from time to time, up to 1,500,000 shares of our common stock through public or private transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale or at negotiated prices. For additional information on the method and manner of sale, refer to the section entitled "Plan of Distribution" on page 80. We will use the net proceeds received from the sale of these shares to make dividend payments to holders of our Series B preferred stock. The net proceeds from the sale of these shares are intended to cover dividends payable for eight quarterly periods. A holder of our Series B preferred stock may alternatively elect to receive as payment of dividends the shares of our common stock offered by this prospectus in lieu of the proceeds received from the sale of these shares.

Our common stock is quoted on the Nasdaq National Market under the symbol "FCEL". The last reported sale price of our common stock on the Nasdaq National Market on March 9, 2005 was \$11.54 per share.

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

Investing in our common stock involves risks. See "Risk Factors" beginning on page 7.

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

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

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

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FORWARD-LOOKING STATEMENTS

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

• the development and commercialization schedule for our fuel cell technology and products;

- · future funding under government research and development contracts;
- \cdot the expected cost competitiveness of our fuel cell technology and products;

• our intellectual property;

• the timing and availability of our products;

• the electric power supply industry and the distributed generation market;

· our business strategy; and

• general economic conditions in the electric power supply industry and our target markets.

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

ABOUT THIS PROSPECTUS

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

BACKGROUND

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

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

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

As used in this prospectus, all degrees refer to Fahrenheit (°F), and kilowatt and megawatt numbers designate nominal or rated capacity of the referenced power plant. As used in this prospectus, "efficiency" or "electrical efficiency" means the ratio of the electrical energy (AC) generated in the conversion of a fuel to the total energy contained in the fuel (lower heating value, the standard for power plant generation, which assumes the water in the product is in vapor form; as opposed to higher heating value, which assumes the water in the product is in the liquid form); "overall energy efficiency" refers to efficiency based on the electrical output plus useful heat output of the power plant; "kilowatt" (kW) means 1,000 watts; "megawatt" (MW) means 1,000,000 watts; "gigawatt" (GW) means 1,000,000,000 watts; "terawatt" (TW) means 1,000,000,000 watts; "kilowatt hour" (kWh) is equal to 1 kW of power supplied to or taken from an electric circuit steadily for one hour; "gigawatt hour" (GWh) is equal to 1 GW of power supplied to or taken from an electric circuit steadily for one hour; "terawatt hour" (TWh) is equal to 1 TW of power supplied to or taken from an electric circuit steadily for one hour; and "MMBtu" is equal to 0 me million British Thermal Unit (the amount of heat necessary to raise one pound of pure water from 59°F to 60 °F at a specified constant pressure).

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

Additional technical terms and definitions:

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

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

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

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

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

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

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

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

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

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

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

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SUMMARY

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

FuelCell Energy, Inc.

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

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

Direct FuelCell (DFC) Power Plants

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

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

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

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

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

Solid Oxide Fuel Cells

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

Recent Developments

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

In connection with the acquisition, we issued, in the aggregate, approximately 8.2 million of our common shares and exchangeable shares (exchangeable shares) issued by FuelCell Energy, Ltd., our wholly-owned Canadian subsidiary (formerly FCE Canada Inc.). We also assumed Global's Series 2 preferred shares. Total consideration for the acquisition was approximately \$94.8 million.

On May 28, 2004, we sold Global's TEG business for approximately \$16 million. The sale of the TEG business was effected through a sale of all of the outstanding common shares of Global. Prior to the sale, Global transferred substantially all of its assets and liabilities not relating to its TEG business (including substantially all of Global's assets and liabilities relating to its SOFC business and substantially all of its cash) to FuelCell Energy, Ltd. In addition, prior to the sale, the Global Series 2 preferred shares were cancelled and replaced with substantially equivalent Class A cumulative redeemable exchangeable preferred shares (which we refer to as the Series 1 preferred shares) issued by FuelCell Energy, Ltd.

On October 29, 2004, we redeemed all of the approximately two million issued and outstanding exchangeable shares issued by FuelCell Energy, Ltd. The exchangeable shares were redeemed in exchange for shares of our common stock on a one-for-one basis. The redemption had no impact on the total number of shares of our common stock deemed outstanding.

On November 1, 2004, we transferred substantially all of FuelCell Energy, Ltd.'s SOFC assets and operations to Versa Power Systems, Ltd., a Canadian corporation and wholly-owned subsidiary of Versa Power Systems, Inc. (Versa). In exchange, we received additional shares of Versa common stock, increasing our ownership position in Versa to 42 percent. We also received a second seat on Versa's board, which was increased from six to seven members.

Following the transaction, we pledged the Versa shares we received in the transaction to Enbridge, Inc., the holder of all of the Series 1 preferred shares issued by FuelCell Energy, Ltd. The pledge secures our guaranty of the obligations of FuelCell Energy, Ltd. under the Series 1 preferred shares to Enbridge.

On November 11, 2004 we entered into a purchase agreement with Citigroup Global Markets Inc., RBC Capital Markets Corporation, Adams Harkness, Inc., and Lazard Freres & Co., LLC (collectively referred to as the "Initial Purchasers") for the private placement under Rule 144A of up to 135,000 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000). On November 17, 2004, we closed on the sale of 100,000 shares of Series B preferred stock to the Initial Purchasers. Under the terms of the purchase agreement, the Initial Purchasers were granted an over-allotment option to purchase up to an additional 35,000 shares of Series B preferred stock through January 25, 2005. On January 14, 2005, we sold an additional 5,875 shares of our Series B preferred stock to the Initial Purchasers as part of the over-allotment option. Net proceeds to us were approximately \$99 million.

The Offering

Common stock offered	1,800,000 shares.					
Common stock to be outstanding after this offering	48,186,299 shares. ⁽¹⁾					
Use of proceeds	Up to 300,000 shares of our common stock will be issued to certain of our employees as partial payment for annual bonuses earned with respect to our performance targets for our fiscal year ended October 31, 2004 and future periods. The proceeds from the sale of up to 1,500,000 shares of our common stock that may be offered and sold by us from time to time pursuant to this prospectus, net of any brokers' fees or commissions, shall be used by us to make dividend payments to holders of our Series B preferred stock for eight quarterly periods, or in the alternative, a holder of our Series B preferred stock may elect to receive as payment of dividends the shares of our common stock offered by this prospectus in lieu of the proceeds received from the sale of these shares. See sections entitled "Use of Proceeds" and "Plan of Distribution."					
Risk factors	See section entitled "Risk Factors" and other information in this prospectus for a discussion of factors you should carefully consider before deciding to invest in shares of our common stock.					
Dividend policy	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.					
Nasdaq National Market symbol	FCEL.					

⁽¹⁾ The above outstanding share information is based upon shares of our common stock outstanding as of February 28, 2005. The above outstanding share information excludes approximately 9,010,640 shares of our common stock issuable upon conversion of 105,875 shares of our Series B preferred stock (see "Description of Capital Stock - Series B Preferred Stock"), 225,286 shares of our common stock issuable upon conversion of the Series 1 preferred shares issued by FuelCell Energy, Ltd., our wholly-owned Canadian subsidiary (formerly known as FCE Canada, Inc.) (see "Description of Capital Stock - Series 1 Preferred Shares and Exchangeable Shares"); 1,500,000 shares of our common stock issuable upon exercise of warrants outstanding at February 28, 2005 at a weighted average exercise price of \$16.75 per share; 5,450,658 shares of our common stock issuable upon exercise of options outstanding at February 28, 2005 at a weighted average exercise price of \$10.52 per share under our stock option plans; 1,074,631 shares of our common stock available for future issuance under our stock option plans; and 416,145 shares of our common stock available for future issuance under our stock plan.

Summary Financial Information

The selected consolidated financial data presented below as of the end of each of the years in the five-year period ended October 31, 2004 have been derived from our audited consolidated financial statements together with the notes thereto included elsewhere in this prospectus. The data set forth below is qualified by reference to, and should be read in conjunction with, such financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

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

Consolidated Statement of Operations Data:

Consolidated Statement of Operations Data:										
	2004			Year Ended October 31			· 31,		••••	
		2004		2003		2002		2001		2000
Revenues:										
Research and development										
contracts	\$	18,750	\$	17,709	\$	33,575	\$	20,882	\$	17,986
Product sales and revenue		12,636		16,081		7,656		5,297		2,729
Total revenues		31,386		33,790		41,231		26,179		20,715
Costs and expenses:										
Cost of research and development										
contracts		27,290		35,827		45,664		19,033		12,508
Cost of product sales and revenues		39,961		50,391		32,129		16,214		4,968
Administrative and selling										
expenses		14,901		12,631		10,451		9,100		8,055
Research and development										
expenses		26,677		8,509		6,806		3,108		1,917
Purchased in-process research and										
development		12,200								
Total costs and expenses		121,029		107,358		95,050		47,455		27,448
Loss from operations		(89,643)		(73,568)		(53,819)		(21,276)		(6,733)
License fee income, net		19		270		270		270		266
Interest expense		(137)		(128)		(160)		(116)		(141)
Interest and other income, net		2,472		6,012		4,876		5,684		2,138
Minority interest										11
Provision for taxes						7				
Net loss from continuing										
operations		(87,289)		(67,414)		(48,840)		(15,438)		(4,459)
Discontinued operations, net of tax		846								
Net loss	\$	(86,443)	\$	(67,414)	\$	(48,840)	\$	(15,438)	\$	(4,459)
Basic and diluted loss per share										
Continuing operations	\$	(1.82)	\$	(1.71)	\$	(1.25)	\$	(0.45)	\$	(0.16)
Discontinued operations	\$	0.01	\$		\$		\$		\$	
Net loss	\$	(1.81)	\$	(1.71)	\$	(1.25)	\$	(0.45)	\$	(0.16)
Basic and diluted weighted average										
shares outstanding		47,875		39,342		39,135		34,359		28,298
č										

Consolidated Balance Sheet Data:

	As of October 31,									
		2004		2003		2002		2001		2000
Cash, cash equivalents and short										
term investments (U.S. treasury										
securities)	\$	152,395	\$	134,750	\$	205,996	\$	274,760	\$	74,754
Working capital		156,798		143,998		218,423		276,173		71,576
Total current assets		178,866		160,792		234,739		289,225		79,405
Long-term investments (U.S.										
treasury securities)				18,690		14,542		15,773		
Total assets		236,510		223,363		289,803		334,020		91,028
Total current liabilities		22,070		16,794		16,316		13,052		7,588
Total non-current liabilities		1,476		1,484		1,785		1,252		
Total shareholders' equity		212,964		205,085		271,702		319,716		83,251
Book value per share(1)	\$	4.42	\$	5.20	\$	6.93	\$	8.20	\$	2.65

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

RISK FACTORS

Investing in our securities involves risks. Before investing in our securities, you should carefully consider the following risk factors as well as the other information included and incorporated by reference in this prospectus. If any of the following risks actually occur, our business, financial condition, or results of operations and could be materially and adversely affected. In such cases, the trading price of our securities could decline, and you may lose all or part of your investment.

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

We have been transitioning from a U.S. government contract research and development company to a commercial products developer and manufacturer. As such, we have not achieved profitability since our fiscal year ended October 31, 1997 and expect to continue to incur net losses and generate negative cash flow until we can produce sufficient revenues to cover our costs.

We incurred net losses of \$86.4 million and \$67.4 million for the fiscal years ended October 31, 2004 and 2003, respectively. We anticipate that we will continue to incur losses and generate negative cash flow until we can cost-effectively produce and sell our Direct FuelCell products, which we do not expect to occur for several years. We may never become profitable. Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future. For the reasons discussed in more detail below, there are substantial uncertainties associated with our achieving and sustaining profitability.

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

Our cost reduction strategy is based on the assumption that a significant increase in production will result in economies of scale. In addition, certain aspects of our cost reduction strategy rely on advancements in our manufacturing process, engineering design and technology (including projected power output) that, to a large degree, are currently not ascertainable. Our failure to achieve a lower Direct FuelCell product cost structure through economies of scale, improvements in the manufacturing process and engineering design and technology maturation would have a material adverse effect on our commercialization plans and, therefore, our business, prospects, results of operations and financial condition.

The production costs of our initial commercial products are higher than their sales prices. We recognize that successfully implementing our strategy and obtaining a significant share of the distributed generation market requires that we offer our Direct FuelCell products at competitive prices, which can only be accomplished when production costs are cut substantially from current levels. If we are unable to produce Direct FuelCell products at competitive prices relative to alternative technologies and products, our target market customers will be unlikely to buy our fuel cell products.

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

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

Commercialization of our products depends on conducting successful field trials, and any delay, performance failure or perceived problem with our field trials could have a material adverse effect on our business, prospects, results of operations and financial condition.

One key aspect of our strategy is to leverage the success of our demonstration, field trial and field follow projects into long-term distributor-type relationships that will result in these distributors marketing our Direct FuelCell products directly to energy customers. For example, we are operating fourteen Direct FuelCell units in the United States and five Direct FuelCell units in Japan and MTU CFC Solutions GmbH is currently field-testing eight 250 kW power plants in Germany and Spain that incorporate the Direct FuelCell as their fuel cell components. We believe that our Direct FuelCell commercialization program depends upon our conducting additional commercial field trials and demonstration projects of our power plants and completing substantial additional research and development.

Our demonstration, field trial and field follow projects may encounter problems and/or delays for a number of reasons, including the failure of our technology, the failure of the technology of others (including our balance of plant suppliers), the failure to combine these technologies properly (including control system coordination) and the failure to maintain and service the test prototypes properly. Many of these potential problems and delays are beyond our control. A failure by us to conduct field trials and demonstration projects of our megawatt class products or a failure to site the scheduled sub-megawatt power plants and complete these commercial field trials and research and development as currently planned could delay the timetable by which we believe we can begin to commercially sell our Direct FuelCell products. The failure of planned commercial field trials to perform as well as we anticipate could also have a material adverse effect on our commercialization plans, including the ability to enter into long-term distributor-type relationships for our Direct FuelCell products. Any delay, performance failure or perceived problem with our field trials could hurt our reputation in the distributed generation market and, therefore, could have a material adverse effect on our business, prospects, results of operations and financial condition.

We currently face and will continue to face significant competition.

Our Direct FuelCell currently faces, and will continue to face, significant competition. We compete on the basis of our products' reliability, fuel efficiency, environmental considerations and cost. Technological advances in alternative energy products or improvements in the electric grid or other 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.

Many companies in the United States 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 in the sub-megawatt and megawatt classes. Emerging fuel cell technologies (and companies developing them) include proton exchange membrane fuel cells (Ballard Power Systems, Inc.; United Technologies Corp. or UTC Fuel Cells; and Plug Power), phosphoric acid fuel cells (UTC Fuel Cells) and solid oxide fuel cells (Siemens Westinghouse Electric Company, Sulzer Hexis, McDermott, GE/ Honeywell, Delphi and Accumentrics). Each of these competitors has the potential to capture market share in our target markets.

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

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

We may not meet our product development and commercialization milestones, which may have a material adverse effect on our operations and stock price.

We have established product development and commercialization milestones that we use to assess our progress toward developing commercially viable Direct FuelCell products. These milestones relate to technology and design improvements as well as to dates for achieving development goals. To gauge our progress, we operate, test and evaluate our Direct FuelCell products under actual conditions. If our systems exhibit technical defects or are unable to meet cost or performance goals, including power output, useful life and reliability, our commercialization schedule could be delayed and potential purchasers of our initial commercial Direct FuelCell products may decline to purchase them or choose to purchase alternative technologies. We cannot be sure that we will successfully achieve our milestones in the future or that any failure to achieve these milestones will not result in potential competitors gaining advantages in our target market. Failure to meet publicly announced milestones might have a material adverse effect on our operations and our stock price.

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

To date, we have focused primarily on research and development and conducting demonstrations and field trials. We have limited experience manufacturing our Direct FuelCell products on a commercial basis. We have installed equipment that will allow us to produce 50 MW of Direct FuelCell products per year. We expect that we will then increase our manufacturing capacity based on market demand. We believe that we can expand our manufacturing capacity to between 125 and 150 MW of Direct FuelCell products at our current facility. We cannot be sure that we will be able to achieve our 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. Given our dependence on government research and development contracts and the necessity of providing government entities with substantial amounts of information, our sales process has historically been long and time-consuming. We will need to continue to shorten the time from initial contact to final product delivery if we hope to expand production, reach a wider customer base and forecast revenues with any degree of certainty. 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 shorten the sales cycle for our Direct FuelCell products or to develop these advanced manufacturing capabilities and processes, or meet our cost goals, could have a material adverse effect on our business, prospects, results of operations and financial condition.

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

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

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

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

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

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

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

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

Our fuel cell revenues have been principally derived from a long-term cooperative agreement and other contracts with the U.S. Department of Energy ("DOE"), the U.S. Department of Defense, the U.S. Navy and the National Aeronautics and Space Administration. These agreements are important to the continued development and commercialization of our technology and our products.

Generally, our U.S. government research and development contracts, including the DOE (Product Design Improvement) cooperative agreement, 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 audits of our cost reduction efforts and our cost projections. 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 amount allocated by the DOE under our DOE cooperative agreements or the full amounts awarded under our other government research and development contracts. Failure to receive the full amounts under any of our

government research and development contracts could materially and adversely affect our commercialization plans and, therefore, our business, prospects, results of operations and financial condition.

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

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

Fourteen United States 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 United States 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 United States government to take title to these patents and license the patented technology to third parties if the contractor fails to utilize the patents. In addition, our DOE-funded research and development agreements also require us to agree that we will not provide to a foreign entity any fuel cell technology subject to that agreement unless the fuel cell technology will be substantially manufactured in the U.S. Accordingly, we could lose some or all of the value of these patents.

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

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

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

We do not plan to establish a direct distribution infrastructure for our Direct FuelCell products. A key aspect of our strategy is to use multiple third-party distribution channels to ultimately service our diverse customer base. Depending on the needs of the customer, our Direct FuelCell products could be distributed through a value-added distributor who could provide a package of our products and various other components such as flywheels and battery storage devices; through an energy services company that could arrange various ancillary services for the customer; or through power generation equipment suppliers.

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

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

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

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

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

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

Failure to protect our existing intellectual property rights may result in the loss of our exclusivity or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation or be enjoined from using such intellectual property. We do not currently conduct freedom to operate analyses. We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. The patents that we have obtained will expire between 2005 and 2023 and the average remaining life of our U.S. patents is approximately 10.7 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 patentable, particularly as it relates to our manufacturing processes and engineering design. In addition, some of our intellectual property includes technologies and processes that may be similar to the

patented technologies and processes of third parties. If we are found to be infringing third-party patents, we do not know whether we will able to obtain licenses to use such patents on acceptable terms, if at all. Our patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope and enforceability of a particular patent. Accordingly, we cannot assure you that:

- \cdot any of the U.S., Canadian or other foreign patents owned by us or other patents that third parties license to us will not be invalidated, circumvented, challenged, rendered unenforceable or licensed to others; or,
- \cdot any of our pending or future patent applications will be issued with the breadth of claim coverage sought by us, if issued at all.

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

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

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

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

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

Our future success is substantially dependent on the continued services and on the performance of our executive officers and other key management, engineering, scientific, manufacturing and operating personnel, particularly Jerry Leitman, our President and Chief Executive Officer. The loss of the services of any executive officer, including Mr. Leitman, 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 and technical personnel. Our inability to attract and retain additional qualified management and technical personnel and technical personnel. Our inability to attract and retain additional qualified management and technical personnel and technical personnel. Our inability to attract and retain additional qualified management and technical personnel. Our inability to attract and retain additional qualified management and technical personnel. Our inability to attract and retain additional qualified management and technical personnel.

Our management may be unable to manage rapid growth effectively.

We expect to 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. The proposed expansion will 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 our rapid growth effectively will require us to continue to improve our operations, to improve our financial and management information systems and to train, motivate and manage our employees. Difficulties in effectively managing the budgeting, forecasting and other process control issues presented by such a rapid expansion could harm our business, prospects, results of operations and financial condition.

We may be affected by environmental and other governmental regulation.

As we begin to commercialize our Direct FuelCell products, we will be subject to federal, state, provincial or local regulation with respect to, among other things, emissions and siting. Assuming no co-generation applications are used in conjunction with our larger Direct FuelCell plants, they will discharge humid flue gas at temperatures of approximately 700-800° F, water at temperatures of approximately 10-20 ° F above surrounding air temperatures and carbon dioxide. These emissions will require permits that we expect (but cannot ensure) will be similar to those applicable to generating units.

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. This regulation could limit the growth in the use of carbonate fuel cell products, decrease the acceptance of fuel cells as a commercial product and increase our costs and, therefore, the price of our Direct FuelCell products. Accordingly, compliance with existing or future laws and regulations as we begin to commercialize and site our products could have a material adverse effect on our business, prospects, results of operations and financial condition.

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

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

Several states (Texas, New York, California and others) 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. There is also a burden in having to track the requirements of individual states and design equipment to comply with the varying standards. 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 when it is completed to help reduce the barriers to deployment of distributed generation such as fuel cells; however this standard may be delayed or never completed thereby limiting the commercial prospects and profitability of our fuel cell systems.

Changes in government regulations and electric utility industry restructuring may affect demand for our Direct FuelCell products.

Our target market, the distributed generation market, is driven by deregulation and restructuring of the electric utility industry in the United States and elsewhere and by the requirements of utilities, independent power producers and end users. Deregulation of the electric utility industry is subject to government policies that will determine the pace and extent of deregulation. Many states have recently delayed the implementation of deregulation as a result of power disturbances in California several summers ago. Changes in government and public policy over time could further delay or otherwise affect deregulation and, therefore, adversely affect our prospects for commercializing our Direct FuelCell products and our financial results. We cannot predict how the deregulation and restructuring of the electric utility industry will ultimately affect the market for our Direct FuelCell products.

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. These laws and regulations have changed frequently in the past and it is reasonable to expect additional and more stringent changes in the future.

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

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

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

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

Our business exposes us to potential product liability claims that are inherent in hydrogen and products that use hydrogen. Hydrogen is a flammable gas and therefore a potentially dangerous product. Hydrogen is typically generated from gaseous and liquid fuels that are also flammable and dangerous, such as propane, natural gas or methane, in a process known as reforming. Natural gas and propane could leak into a residence or commercial location and combust if ignited by another source. In addition, our Direct FuelCell products operate at high temperatures and our Direct FuelCell products use corrosive carbonate material, which could expose us to potential

liability claims. Any accidents involving our products or other hydrogen-using products could materially impede widespread market acceptance and demand for our Direct FuelCell products. In addition, we might be held responsible for damages beyond the scope of our insurance coverage. We also cannot predict whether we will be able to maintain our insurance coverage on acceptable terms.

We are subject to risks inherent in international operations.

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

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

MTU currently owns approximately 5.7% of our outstanding common stock (based upon the number of shares of our common stock outstanding as of February 28, 2005). James D. Gerson beneficially owns approximately 2.8% of our outstanding common stock. Loeb Investors Co. LXXV and Warren Bagatelle (a managing director of an affiliate of Loeb Investors Co. LXXV) collectively beneficially own approximately 2.3% of our outstanding common stock (based upon the number of shares of our common stock outstanding as of February 28, 2005). These ownership levels could make it difficult for a third party to acquire our common stock or have input into the decisions made by our board of directors, which include Michael Bode (Chief Executive Officer of MTU CFC Solutions GmbH), James D. Gerson, Warren Bagatelle and Thomas L. Kempner (Chairman and Chief Executive Officer of an affiliate of Loeb Investors Co. LXXV). MTU is also a licensee of our technology and a purchaser of our Direct FuelCell products. Therefore, it may be in MTU's interest to possess substantial influence over matters concerning our overall strategy and technological and commercial development. In addition, Wellington Management Company, LLP owns approximately 13.8% of our outstanding common stock and is therefore in a position to substantially influence matters submitted to a vote of our security holders.

MTU may develop competing technologies for its own products.

MTU is currently developing carbonate fuel cell technologies based on the know-how that we have provided to MTU under license. If MTU develops its own carbonate fuel cell design before our license expires in 2010, it must use good faith efforts to license the technology to us. If MTU is successful but does not grant us a license, it may be directly competing with us while having a significant ownership interest in us, and a seat on our board of directors. We have agreed with MTU to continue developing products with as much commonality as possible. However, the license agreement between us and MTU provides that each of us retains the right to independently pursue the development of carbonate fuel cell technologies.

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;
 - $\cdot\,$ demand for our common stock; and,
 - general technological or economic trends.

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

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

Provisions in our certificate of incorporation and by-laws and in Delaware and Connecticut corporate law may make it difficult and expensive for a third party to pursue a tender offer, change in control or takeover attempt that is opposed by our management and board of directors. Public stockholders who might desire to participate in such a transaction may not have an opportunity to do so. These anti-takeover provisions could substantially impede the ability of public stockholders to benefit from a change in control or change in our management and board of directors.

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

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

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

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

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

The terms of the Series 1 preferred shares issued by FuelCell Energy, Ltd., our wholly-owned, indirect subsidiary, provide rights to the holder, Enbridge, Inc. (Enbridge), including dividend and conversion rights among others that could negatively impact us. For example, the terms of the Series 1 preferred shares provide that the holders are entitled to receive cumulative dividends for each calendar quarter for so long as such shares are outstanding. Assuming the exchange rate for Canadian dollars is Cdn.\$1.3104 to U.S.\$1.00 at the time of the applicable dividend payment date, we could be required to pay a preferred dividend of approximately \$238,477 per calendar quarter, subject to reduction in accordance with the terms of the Series 1 preferred shares. The terms of the Series 1 preferred shares also require that the holder be paid any accrued and unpaid dividends on December 31, 2010. To the extent that there is a significant amount of accrued dividends that is unpaid as of December 31, 2010 and we do not have sufficient working capital at that time to pay the accrued dividends, our financial condition could be adversely affected. We have guaranteed these dividend obligations, including paying a minimum of Cdn.\$500,000 in cash annually to Enbridge for so long as Enbridge holds the Series 1 preferred shares. We have also guaranteed the liquidation obligations of FuelCell Energy, Ltd. under the Series 1 preferred shares.

We are also required to issue common stock to the holder of the Series 1 preferred shares if and when the holder exercises its conversion rights. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders. For example, assuming the holder of the Series 1 preferred shares exercises its conversion rights after July 31, 2020, the exchange rate for Canadian dollars is Cdn.\$1.3104 to U.S.\$1.00 at the time of such conversion and our common stock price is \$14.62 at the time of such conversion, we would be required to issue approximately 1,373,615 shares of our common stock.

The terms of the Series B preferred shares also provide rights to their holders that could negatively impact us. Holders of the Series B preferred shares are entitled to receive cumulative dividends at the rate of \$50 per share per year, payable either in cash or in shares of our common stock. To the extent the dividend is paid in shares, additional issuances could be dilutive to our existing stockholders and the sale of those shares could have a negative impact on the price of our common stock. The Series B preferred stock is also convertible into common stock at a price of \$11.75 per share. Conversion of the Series B preferred stock at a time when the price of our common stock is greater than \$11.75 per share would also have a dilutive impact on our existing stockholders. Furthermore, the conversion rate applicable to the preferred stock is subject to adjustment upon the occurrence of certain events.

USE OF PROCEEDS

Up to 300,000 shares of our common stock registered on a registration statement on Form S-1, for which this prospectus forms a part, will be issued to certain of our employees as partial payment for annual bonuses earned with respect to our performance targets for our fiscal year ended October 31, 2004 and future periods.

The proceeds from the sale of up to 1,500,000 shares of our common stock that may be offered and sold by us from time to time pursuant to this prospectus, net of any broker's fee or commissions, shall be used to make dividend payments to holders of our Series B preferred stock for each of the eight quarterly periods ending on May 15, August 15 and November 15, 2005, February 15, May 15, August 15 and November 15, 2006 and February 15, 2007. (See section entitled "Plan of Distribution"). In the alternative, a holder of our Series B preferred stock may elect to receive as payment of dividends the shares of our common stock offered by this prospectus in lieu of the proceeds received from the sale of these shares.

PRICE RANGE OF COMMON STOCK

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

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

	Common Stock Price				
	H	ligh	Low		
Fiscal Year Ended October 31, 2002					
First Quarter	\$	21.85	\$	13.55	
Second Quarter	\$	18.46	\$	15.15	
Third Quarter	\$	16.73	\$	6.62	
Fourth Quarter	\$	8.01	\$	4.58	
Fiscal Year Ended October 31, 2003					
First Quarter	\$	9.05	\$	5.39	
Second Quarter	\$	6.22	\$	5.03	
Third Quarter	\$	9.90	\$	6.28	
Fourth Quarter	\$	15.37	\$	6.81	
Fiscal Year Ended October 31, 2004					
First Quarter	\$	17.25	\$	11.44	
Second Quarter	\$	19.44	\$	11.86	
Third Quarter	\$	17.23	\$	8.36	
Fourth Quarter	\$	13.14	\$	7.42	
Fiscal Year Ended October 31, 2005					
First Quarter	\$	13.01	\$	8.02	
Second Quarter (through February 28, 2005)	\$	11.30	\$	8.88	

On March 9, 2005, the last reported sale price of our common stock on the Nasdaq Stock Market was \$11.54 per share. As of February 28, 2005, there were 821 holders of record of our common stock.

DIVIDEND POLICY

We have never paid a cash dividend on our common stock and do not anticipate paying any cash dividends on our 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.

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, 2004 have been derived from our audited consolidated financial statements together with the notes thereto included elsewhere in this prospectus. The data set forth below is qualified by reference to, and should be read in conjunction with, such financial statements and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

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

Consolidated Statement of Operations Data:

· · · · · · · · · · · · · · · · · · ·	 	Year						
	2004	2003	2002	2001			2000	
Revenues:								
Research and development								
contracts	\$ 18,750	\$ 17,709	\$	33,575	\$	20,882	\$	17,986
Product sales and revenue	12,636	16,081		7,656		5,297		2,729
Total revenues	31,386	33,790		41,231		26,179		20,715
Costs and expenses:								
Cost of research and development								
contracts	27,290	35,827		45,664		19,033		12,508
Cost of product sales and revenues	39,961	50,391		32,129		16,214		4,968
Administrative and selling								
expenses	14,901	12,631		10,451		9,100		8,055
Research and development								
expenses	26,677	8,509		6,806		3,108		1,917
Purchased in-process research and								
development	12,200							
Total costs and expenses	121,029	107,358		95,050		47,455		27,448
Loss from operations	(89,643)	(73,568)		(53,819)		(21,276)		(6,733)
License fee income, net	19	270		270		270		266
Interest expense	(137)	(128)		(160)		(116)		(141)
Interest and other income, net	2,472	6,012		4,876		5,684		2,138
Minority interest								11
Provision for taxes				7				
Net loss from continuing								
operations	(87,289)	(67,414)		(48,840)		(15,438)		(4,459)
Discontinued operations, net of tax	846							
Net loss	\$ (86,443)	\$ (67,414)	\$	(48,840)	\$	(15,438)	\$	(4,459)
Basic and diluted loss per share								
Continuing operations	\$ (1.82)	\$ (1.71)	\$	(1.25)	\$	(0.45)	\$	(0.16)
Discontinued operations	\$ 0.01	\$ 	\$		\$		\$	
Net loss	\$ (1.81)	\$ (1.71)	\$	(1.25)	\$	(0.45)	\$	(0.16)
Basic and diluted weighted average								
shares outstanding	47,875	39,342		39,135		34,359		28,298

Consolidated Balance Sheet Data:

	As of October 31,									
		2004		2003		2002		2001		2000
Cash, cash equivalents and short										
term investments (U.S. treasury										
securities)	\$	152,395	\$	134,750	\$	205,996	\$	274,760	\$	74,754
Working capital		156,798		143,998		218,423		276,173		71,576
Total current assets		178,866		160,792		234,739		289,225		79,405
Long-term investments (U.S.										
treasury securities)				18,690		14,542		15,773		
Total assets		236,510		223,363		289,803		334,020		91,028
Total current liabilities		22,070		16,794		16,316		13,052		7,588

Total non-current liabilities	1,476	1,484	1,785	1,252	
Total shareholders' equity	212,964	205,085	271,702	319,716	83,251
Book value per share(1)	\$ 4.42	\$ 5.20	\$ 6.93	\$ 8.20	\$ 2.65

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

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

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

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

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

Results of operations. This section provides an analysis of our results of operations for the years ended October 31, 2004, 2003 and 2002. In addition, a description is provided of transactions and events that impact the comparability of the results being analyzed.

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

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

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

OVERVIEW AND RECENT DEVELOPMENTS

Overview

FuelCell is a world leader in the development and manufacture of fuel cell power plants for clean, efficient and reliable electric power generation. We have been developing fuel cell technology since our founding in 1969. We are currently commercializing our core carbonate fuel cell products (Direct FuelCell[®] or DFC[®] Power Plants), stationary applications for commercial and industrial customers, and continuing to develop our next generation of carbonate fuel cell products. In addition, we are beginning the development of another high temperature fuel cell system, planar solid oxide fuel cell (SOFC) technology, as a prime contractor in the U.S. Department of Energy's (DOE) Solid State Energy Conversion Alliance (SECA) Program and through our 42 percent ownership interest in Versa Power Systems (Versa).

Direct FuelCell Power Plants

Increasing demand for reliable power worldwide, supplemented by air pollution concerns caused by older, combustion power generation, and unreliable electrical grid delivery systems present significant market opportunities for our core distributed generation products. Our proprietary carbonate DFC power plants electrochemically produce electricity directly from readily available hydrocarbon fuels, such as natural gas and wastewater treatment gas. We believe our products offer significant advantages compared to other power generation technologies, including:

- High fuel efficiency;
- · Ultra-clean emissions;
- · Improved reliability;
 - Quiet operation;
- · Flexible siting and permitting requirements;
 - · Scalability;
- Ability to provide electricity and heat for cogeneration applications, such as district heating, process steam, hot water and absorption chilling for air conditioning;
- Potentially lower operating, maintenance and generation costs than alternative distributed power generation technologies; and
- Because our DFC power plants produce hydrogen from readily available fuels such as natural gas and wastewater treatment gas, they can be used to cost-effectively cogenerate hydrogen as well as electricity and heat.

Our current products, the DFC300A, DFC1500 and DFC3000, are rated in capacity at 250 kW, 1 MW and 2 MW, respectively, and are scalable for distributed applications up to 10 MW or larger. Our products are designed to meet the base load power requirements of a wide range of commercial and industrial customers including wastewater treatment plants (municipal, such as sewage treatment facilities, and industrial, such as breweries and food processors), data centers, manufacturing facilities, office buildings, hospitals, universities, prisons, mail processing facilities and hotels, as well as in grid support applications for utility customers. We are currently operating 29 power plants that incorporate our DFC technology at customer sites throughout the U.S., Europe and Japan. Installations at customer sites, including those that have completed their operations, have generated more than 55 million kWh of electricity through January 10, 2005.

On November 3, 2003, we completed our acquisition of Global located in Calgary, Canada. At the time of the acquisition, Global had been developing SOFC power plants since 1997 with the goal of commercializing its technology for residential, commercial and light industrial applications ranging in size from 3 to 10 kW. Through its thermoelectric generator (TEG') product line, Global also sold thermoelectric generators for use as a source of electrical power in remote areas. In connection with the acquisition, we issued, in the aggregate, approximately 8.2 million shares of our common stock and exchangeable shares, the latter of which were issued by FuelCell Energy, Ltd., our wholly-owned Canadian subsidiary (formerly FCE Canada Inc.). We also assumed Global's Series 2 Preferred Shares. Total consideration for the acquisition was approximately \$94.8 million.

On May 28, 2004, we sold Global's TEG business for proceeds of approximately \$16 million. The sale of the TEG business was affected through a sale of all of the outstanding common shares of Global. Prior to the sale, Global transferred substantially all of its assets and liabilities not relating to its TEG business (including substantially all of Global's assets and liabilities relating to its SOFC business and substantially all of its cash) to FuelCell Energy, Ltd. In addition, prior to the sale, the Global Series 2 Preferred Shares were cancelled and replaced with substantially equivalent Class A cumulative redeemable exchangeable preferred shares (which we refer to as the Series 1 preferred shares) issued by FuelCell Energy, Ltd.

On October 31, 2004, we redeemed all of the approximately two million issued and outstanding exchangeable shares issued by FuelCell Energy, Ltd. The exchangeable shares were redeemed in exchange for shares of our common stock on a one-for-one basis. The redemption had no impact on the total number of shares of our common stock deemed outstanding.

Recent Developments

Preferred Share Offering

On November 11, 2004 we entered into a purchase agreement with Citigroup Global Markets Inc., RBC Capital Markets Corporation, Adams Harkness, Inc., and Lazard Freres & Co., LLC (collectively referred to as the "Initial Purchasers") for the private placement under Rule 144A of up to 135,000 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000). On November 17, 2004, we closed on the sale of 100,000 shares of Series B preferred stock to the Initial Purchasers. Under the terms of the purchase agreement, the Initial Purchasers were granted an over-allotment option to purchase up to an additional 35,000 shares of Series B preferred stock through January 25, 2005. On January 14, 2005, we sold an additional 5,875 shares of our Series B preferred stock to the Initial Purchasers as part of the over-allotment option. Net proceeds to us were approximately \$99 million.

Sale of Canadian Solid Oxide Fuel Cell Operation to Versa Power Systems, Inc.

On November 1, 2004, pursuant to an asset purchase agreement, dated October 19, 2004, by and among us, our wholly-owned Canadian subsidiary, FuelCell Energy, Ltd., Versa Power Systems, Inc. (Versa), a Delaware corporation, and Versa Power Systems, Ltd., a Canadian corporation and wholly-owned subsidiary of Versa Power Systems, Inc., FuelCell Energy, Ltd. transferred substantially all of its solid oxide fuel cell (SOFC) assets and operations (including manufacturing and test equipment, intellectual property and personnel) to Versa Power Systems, Ltd. In exchange, we received 5,714 shares of Versa Power Systems, Inc. common stock, increasing our ownership position in Versa to 7,714 shares, or 42 percent. No cash was exchanged in the transaction.

Assets sold to Versa totaled approximately \$12.4 million and were classified as held for sale on the balance sheet as of October 31, 2004. Upon closing of the sale on November 1, 2004, our total investment in Versa was approximately \$14.4 million and will be classified as "Equity investments". We will account for this investment under the equity method in future periods.

Pursuant to the terms of the transaction, we expect to incur cash costs in the range of approximately \$1.0 million to \$1.5 million related to severance and facility consolidations in Calgary, Canada. Approximately \$0.1 million of this amount is related to severance payments to employees paid during the quarter ended October 31, 2004. The remaining payments are expected to be made during fiscal year 2005. In addition, we have committed to paying future severance costs for time and service accrued up to November 1, 2004 by employees that are moving to Versa in the event that they are terminated by Versa Power Systems, Ltd. (or its parent). Our liability for such severance costs is limited to the period commencing on November 1, 2004 through the earlier of (1) award of Phase 2 of the SECA program to FuelCell, (2) one year after completion of Phase 1 of the SECA program, or (3) February 26, 2008. Subsequent to this period, Versa Power Systems, Ltd. (or its parent) will be responsible for the severance liability for such employees. We estimate this liability at approximately \$0.8 million.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Revenue Recognition

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

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

While government research and development contracts may extend for many years, funding is often provided incrementally on a year-by-year basis if contract terms are met and Congress has authorized the funds. As of October 31, 2004, research and development sales backlog totaled \$16.4 million, of which 79 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.

Fuel cell product sales and revenues include revenues from product sales and service contracts. 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 recognized ratably over the contract term while costs are expensed as incurred. As our fuel cell products are in their initial stages of development and market acceptance, actual costs incurred could differ materially from those previously estimated. Once we have established that our fuel cell products have achieved commercial market acceptance and future costs can be reasonably estimated, then estimated costs to complete an individual contract, in excess of revenue, will be accrued immediately upon identification.

Warrant Value Recognition

Warrants have been issued as sales incentives to certain of our business partners. These warrants vest as orders from our business partners exceed stipulated levels. Should warrants vest, or when management estimates that it is probable that warrants will vest, we will record a proportional amount of the fair value of the warrants against related revenue as a sales discount. During the three months ended April 30, 2004, a tranche of 200,000 warrants issued to one of our business partners vested with the receipt of a 4 MW order. The fair value of these warrants was determined to be \$0.5 million. This has been recorded as other current assets on the consolidated balance sheet with the offsetting entry to additional paid in capital. In accordance with our warrant value recognition policy, as we recognize the associated revenue for orders placed in accordance with these sales agreements, a proportional amount of the fair value of the warrants will be recorded against the revenue as a sales discount. To date, approximately \$0.1 million of sales discounts have been recognized.

Inventories

During the procurement and manufacturing process of a fuel cell power plant, costs for material, labor and overhead are accumulated in raw materials and work-in-process (WIP) inventory until they are transferred to a customer contract.

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

As of October 31, 2004 and October 31, 2003, the LCM adjustment to cost basis of inventory and advance payments to vendors was approximately \$13.5 million and \$11.0 million respectively, which equates to a reduction of approximately 45 and 41 percent respectively of the inventory value. The increase in the adjustment to cost basis and percentage over our fiscal year ended October 31, 2003 is due to changes in the mix of inventory. As of October 31, 2004, our balance of plant inventory and advances to vendors had increased over the prior year-end due to our current production schedule. As inventory levels increase or decrease, appropriate adjustments to cost basis are made.

Internal Research and Development Expenses

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

RESULTS OF OPERATIONS

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

Comparison of the Years Ended October 31, 2004 and October 31, 2003

Revenues and costs of revenues

The following tables summarize our revenue and cost mix for the years ended October 31, 2004 and 2003 respectively (dollar amounts in thousands):

Decement		Year H October				Year E October 3	Percentage Increase /	
Revenues:	Rev	venues	Percent of Revenues		Proc Reve	luct nues	Percent of Revenues	(Decrease) in Revenues
Research and development								
contracts	\$	18,750	60%	\$	17	7,709	52%	6%
Product sales and revenues		12,636	40%		16	5,081	48%	(21%)
Total	\$	31,386	100%	\$	33	3,790	100%	(7%)
		Year Ended October 31, 2004 Percent of				Year October	Percentage Increase /	
Cost of revenues:		Costs of Revenues	Costs of Revenues	5	Costs of Revenues		Percent of Costs of Revenues	(Decrease) in Costs of Revenues
Research and development								
contracts	\$	27,290	4	1%	\$	35,827	42%	(24%)
Product sales and revenues		39,961	59	9%		50,391	58%	(21%)

Total revenues for the year ended October 31, 2004 decreased by \$2.4 million, or 7 percent, to \$31.4 million from \$33.8 million during the same period last year. The components of our revenues and cost of revenues are further described as follows:

Research and development contracts

Revenue from research and development contracts will vary from year to year depending on government funding levels, new contracts and work on existing contracts. Revenue from research and development contracts increased 6 percent during the year ended October 31, 2004 to \$18.8 million from \$17.7 million in same period of the prior year. Revenues have increased on the Vision 21 and Solid State Energy Conversion Alliance (SECA) contracts with the U.S. Department of Energy (DOE). These increases were offset by lower revenue from the Clean Coal contract as the installation phase for this two megawatt DFC3000 power plant was completed.

The cost of research and development contract revenue declined by \$8.5 million for the year ended October 31, 2004 (fiscal 2004) compared to the prior year due to the mix of cost shared contracts and reduced costs for the Clean Coal, Product Design Improvement (PDI), and King County contracts as major tasks were completed on those contracts. The ratio of costs to contract revenues was 1.5 to 1, which decreased from 2.0 to 1 when compared to the same period of the prior year. The primary driver of the improved cost ratio was increased funding for the PDI program during fiscal 2004. Significant cost share contracts in fiscal 2004 included Clean Coal, PDI, Vision 21, King County, Navy Phase II and SECA. We concluded work on the PDI contract during the quarter ended October 31, 2004 and do not expect significant future revenues or costs related to this contract.

For strategic reasons, we currently plan to continue to participate in government cost share contracts that advance the development of fuel cells. As a result, we expect that costs on these contracts will be higher than revenues received.

Fuel cell product sales and revenues and product costs

Fuel cell product sales were \$12.6 million for the year ended October 31, 2004 compared to \$16.1 million in the same period of a year ago. The lower product sales and revenues were due to production scheduling for customer requirements and production on power plants for power purchase agreements where product revenues are not recognized until power is sold to the customer over an extended term. Power plant production was at approximately the same level as the prior year (6 MW). As of October 31, 2004, product sales backlog totaled approximately \$26.3 million, compared to \$14.4 million as of October 31, 2003. This backlog does not include 1.5 MW of orders for power purchase agreements for Santa Barbara and Sierra Nevada Brewing Co.

Product costs decreased with lower revenue to \$40.0 million from \$50.4 million. The ratio of costs to revenue increased slightly from 3.1 to 3.2 to 1 over the prior year due to costs totaling approximately \$2.0 million associated with the power purchase agreements noted above. This increase was partially offset by lower overall product costs recognized on power plants built in 2004 when compared to the prior year due to progress on our cost out program.

Our products do not ship on an even production schedule. The shipment date to customers depends on a number of factors that are outside of our control, including siting requirements, construction and permits. We do not have the sales or order history to quantify trends as of yet.

Administrative and selling expenses

Excluding costs from our Canadian SOFC operations, administrative and selling expenses increased by \$1.1 million or 9 percent, to \$13.7 million during the year ended October 31, 2004 compared to \$12.6 million in the prior year. Approximately \$0.8 million of this increase was due to increased sales and marketing expenses and \$0.2 million was due to higher investor relations costs related to our increased shareholder base. In addition, we incurred \$1.2 million of administrative and selling expenses in our Canadian SOFC operations as a result of our acquisition during the year

ended October 31, 2004. We do not expect to incur any significant administrative and selling expenses related to the Canadian SOFC operation in our fiscal year ending October 31, 2005 (fiscal 2005) as it was sold effective November 1, 2004.

Research and development expenses

Excluding costs from our Canadian SOFC operations, research and development expenses increased to \$17.6 million during year ended October 31, 2004 compared to \$8.5 million recorded in 2003. The increase is due to continued focus on our "cost-out" program (implemented in fiscal 2003), product documentation and engineering support for products in the field. During fiscal 2004, we expanded our cost out program by hiring additional engineering employees. Our cost-out program is expected to: reduce material costs, simplify design, improve manufacturing yields, reduce product assembly labor, and reduce production cycle time of our DFC products. In addition, we incurred \$9.0 million of research and development expenses in our Canadian SOFC operations as a result of our acquisition during the year ended October 31, 2004. We do not expect to incur any significant research and development expenses related to the Canadian SOFC operation in fiscal 2005, as it was sold effective November 1, 2004.

Purchased in-process research and development

The \$12.2 million in-process research and development (IPR&D) charge relates to SOFC technology acquired in the Global transaction. In 1997, Global began developing SOFC technology, which is still in development. The \$12.2 million allocated to IPR&D was determined using two established valuation techniques. An average of the cost valuation and market valuation approaches were used to determine the IPR&D amount. The amounts estimated in this valuation were calculated using a risk-adjusted discount rate of 30 percent. As the acquired technology has not yet reached technological feasibility and no alternative future uses existed, it was expensed upon acquisition in accordance with Statement of Financial Accounting Standards (SFAS) No. 2, "Accounting for Research and Development Costs."

The IPR&D acquired was related to one project, the development of a solid oxide fuel cell. Prior to the transaction date, Global spent approximately five years developing this technology. In 2003, we received notice of an award to participate in the DOE's ten-year SECA program to develop low cost solid oxide fuel cells for residential, commercial, and light industrial applications. We currently estimate that it will take approximately five to ten years to complete the development. The SECA program is a cost-share program totaling approximately \$139 million. This technology was subsequently sold to our partner in the SECA program, Versa, along with fixed assets in exchange for stock, which increased our ownership in Versa to approximately 42 percent.

Loss from operations

The loss from operations for the year ended October 31, 2004 totaled \$89.6 million compared to the \$73.6 million recorded in 2003. The loss from operations for the year ended October 31, 2004 totaled \$67.2 million compared to the \$73.6 million recorded in 2003 or a reduction of approximately 9 percent excluding the Canadian SOFC operation. The reduction in operating loss was due to lower cost of research and development and product revenues partially offset by increased administrative, selling and internal research and development costs.

We expect to incur operating losses in future reporting periods 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 out" initiatives. As a result of selling our Canadian SOFC operations, we expect to reduce our annual cash use by approximately \$10.0 million. The Global and SOFC operations were part of Global, which was acquired by us in November 2003, thus there are no comparable periods of the prior year.

Interest and other income, net

Interest and other income, net, declined by \$3.5 million when comparing the fiscal year ended October 31, 2004 to the prior year. During the year ended October 31, 2003, we realized Connecticut state research and development incentives totaling \$3.4 million. We did not realize tax incentives during the year ended October 31, 2004 although we have applied for approximately \$1.5 million of such credits. During the year ended October 31, 2004, we realized foreign currency gains totaling approximately \$0.5 million, which offset a decline (compared to the prior year) of interest income totaling approximately \$0.9 million. The reduction in interest income is due to reduced average interest rates on the invested cash.

Provision for income taxes

We believe, that due to our efforts to commercialize our DFC technology, we will continue to incur losses. Based on projections for future taxable income over the period in which the deferred tax assets are realizable, management believes that significant uncertainty exists surrounding the recoverability of the deferred tax assets. Therefore, no tax benefit has been recognized related to current year losses and other deferred tax assets.

Discontinued operations, net of tax

Discontinued operations reflects the net income of \$0.8 million of the TEG business segment that was sold on May 28, 2004. Refer also to Note 2 - Discontinued Operations of our consolidated financial statements. The Global TEG business segment was acquired by us in November 2003, thus there are no results from discontinued operations in the comparable period of the prior year.

Comparison of the Years Ended October 31, 2003 and October 31, 2002

Revenues and cost of revenues

The following tables summarize our revenue and cost mix for the years ended October 31, 2003 and 2002, respectively (dollar amounts in thousands):

	Year En	ded	Year End	led			
Revenues:					Percentage		
	October 31	, 2003	October 31,	2002	Increase /		
		Percent of		Percent of	(Decrease) in		
	Revenues	Revenues	Revenues	Revenues	Revenues		
Research and							
development							
contracts	\$ 17,709	52%	\$ 33,575	81%	(47%)		
Product sales and							
revenues	16,081	48%	7,656	19%	110%		
Total	\$ 33,790	100%	\$ 41,231	100%	(18%)		

Cost of revenues:	Year Ei	nded		Year E			
	October 3	1, 2003 Percent of		October .	31, 2002	Percentage Increase /	
	Cost of evenues	Costs of Revenues	Cost o	f Revenues	Percent of Costs of Revenues	(Decrease) i Cost	n
	\$ 35,827	42%	\$	45,664	59%		(22%)

Research and						
development						
contracts						
Product sales ar	nd					
revenues		50,391	58%	32,129	41%	57%
Total	\$	86,218	100% \$	77,793	100%	11%
28						

Total revenues for the year ended October 31, 2003 decreased by \$7.4 million or 18 percent, to \$33.8 million from \$41.2 million during the prior year. This decrease in total revenues was comprised of a 47 percent decrease in government research and development contracts partially offset by a 110 percent increase in product sales revenue.

Research and development contracts

Fiscal 2002 research and development contract revenue included a large portion of our one-megawatt and two megawatt power plants for King County, Washington and Clean Coal, respectively. Combined revenue on these contracts was lower in 2003. Also, in 2003, under budgetary constraints, funding from the U.S. government for certain of our other contracts was delayed.

Cost of research and development contracts decreased to \$35.8 million during the year ended October 31, 2003, compared to \$45.7 million during fiscal 2002. The decrease was partially due to completion of tasks on the King County, Washington project and delayed funding on certain government contracts. While our funding was reduced due to timing and budgetary constraints, we continue to participate in cost-share contracts and invest in developing fuel cell technology. Our significant cost share contracts during fiscal 2003 included Clean Coal, Department of Energy, King County, and Navy Phase II. The ratio of costs to contract revenues increased in 2003 as the mix of cost-share contracts increased during the year.

Product sales and revenues

The fiscal 2003 increase in product sales revenue was related to increased manufacturing and delivery of our DFC300A power plants for both our distribution partners and direct customers. As a percent of total revenues, product revenues comprised 48 percent compared to 19 percent in the prior year as we continue to focus our business initiatives on the manufacture and delivery of our fuel cell products.

Cost of product sales and revenues increased to \$50.3 million during the year ended October 31, 2003 compared to \$32.1 million during the prior year. This increase was due to additional product sales recorded during the year. The ratio of costs to contract revenues decreased in 2003 as we have reduced overall product costs through our "cost-out" initiatives and incurred less "first time" costs including qualifying multiple vendors for materials and components.

Administrative and selling expenses

Administrative and selling expenses increased by 21 percent, to \$12.6 million during the year ended October 31, 2003 compared to \$10.5 million in the prior year. This increase was primarily comprised of higher business insurance costs, sales and marketing salaries and franchise taxes.

Research and development expenses

Research and development expenses increased 25 percent, to \$8.5 million during the year ended October 31, 2003 compared to the \$6.8 million recorded in fiscal 2002. This increase is primarily due to increased investment in development costs associated with the design, engineering, fabrication and installation of our products.

Loss from operations

The net result of our revenues and costs was a loss from operations during the year ended October 31, 2003 totaling \$73.6 million. This operating loss is approximately 37 percent higher than the \$53.8 million loss recorded in fiscal 2002. We continue to invest in the standardization of our DFC power plants. For strategic reasons, we also continue to participate in government cost share contracts to advance the development of fuel cells. These factors contributed to our operating loss. Other factors impacting the operating loss included reduced funding on certain government contracts, development of our distribution network, and increases in operating costs including depreciation on new

production equipment, business insurance premiums, information systems and infrastructure.

Interest and other income, net

Interest and other income, net, increased by 23 percent, to \$6.0 million during the year ended October 31, 2003 compared to the \$4.9 million recorded in fiscal 2002. We have participated in a program available from the State of Connecticut that allows certain taxpayers to exchange the amount of research and development credits generated during a taxable year for cash to be received over a three-year period. The increase to interest and other income, net was due, in part, to tax credits generated in fiscal years 2001 and 2002 totaling \$3.4 million being recorded in fiscal 2003. There were no tax credits recorded during fiscal 2002. Interest income for the year declined by \$2.3 million or 47 percent as a result of reduced interest rates and lower cash and investment balances compared to the prior year.

Taxes

We believe that due to our efforts to commercialize our DFC technology, we have and will continue to incur losses. Based on projections for future taxable income over the period in which the deferred tax assets are realizable, management believes that significant uncertainty exists surrounding the recoverability of the deferred tax assets. Therefore, no tax benefit has been recognized related to current year losses and other deferred tax assets.

LIQUIDITY AND CAPITAL RESOURCES

We had approximately \$152.4 million of cash, cash equivalents and investments as of October 31, 2004 compared to \$153.4 million as of October 31, 2003. Net cash and investments used during the year was \$1.0 million, consisting of approximately \$70 million used in operations offset by \$69 million of cash and investments received in the Global Thermoelectric Inc. (Global) transactions. Cash used during the year included approximately \$10.9 million related to our Canadian operations. As our Canadian operations were sold in fiscal 2004, we expect reduced cash use in Canada in future periods.

Subsequent to our fiscal year end, we received net proceeds of approximately \$93.5 million from our preferred stock sale, which closed on November 17, 2004.

Sources and Uses of Cash and Investments

We continue to invest in new product development and bringing our products to market and, as such, we are not currently generating positive cash flow from our operations. Our operations are funded primarily through sales of equity securities and cash generated from operations. Cash from operations includes revenue from government research and development contracts, product sales, license fees and interest income. Our future cash requirements depend on numerous factors including future involvement in research and development contracts, implementing our cost reduction efforts on our fuel cell products and increasing annual order volume.

Future involvement in research and development contracts

Our research and development contracts are generally multi-year, cost reimbursement type 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. To obtain these contracts, we must continue to prove the benefits of our technologies and be successful in our competitive bidding.

Implementing our cost reduction efforts on our fuel cell products

We believe that reducing product cost is essential for us to penetrate the market for our fuel cell products and is critical to achieving profitability. We believe this will reduce and/or eliminate the need for incentive funding programs that are currently available to allow our product pricing to compete with grid-delivered power and other distributed generation technologies. In 2003, we began a "cost-out" program that focuses on three key areas: • increased performance output;

• increased stack life; and

· design simplification and materials replacement and/or elimination to reduce product cost.

Increasing annual order volume

We believe that increased production volumes will spread fixed costs over more units of production, resulting in a lower per unit cost. Our manufacturing, testing and conditioning facilities have equipment in place to accommodate 50 MW of annual production. Our multi-disciplined cost reduction program is expected to significantly reduce our product costs over time. We currently believe that we can achieve operating break-even at annual production volumes of approximately 100 MW. Our fiscal 2004 production volume is estimated at approximately 6 MW.

We anticipate that our existing capital resources, together with anticipated revenues, will be adequate to satisfy our planned financial requirements and agreements through at least the next twelve months.

Cash Inflows and Outflows

During year ended October 31, 2004, total cash and cash equivalents and investments decreased by \$1.0 million, compared with a decrease of \$67.1 million during the year ended October 31, 2003. In fiscal 2004, we had a net cash use of approximately \$70.0 million offset by cash and investments acquired in the Global acquisition and subsequent disposition (net of fees) totaling \$69.0 million.

The key components of our cash inflows and outflows from continuing operations were as follows:

Operating Activities: During the year ended October 31, 2004, we used \$64.6 million in cash in our operating activities, which consists of a net loss for the period of approximately \$86.4 million, offset by non-cash adjustments totaling \$20.6 million, cash generated from working capital of approximately \$2.0 million and income from discontinued operations of approximately \$.8 million. This compares to an operating cash usage of \$58.8 million during the year ended October 31, 2003.

Accounts Receivable

Accounts receivable as of October 31, 2004 increased by approximately \$2.7 million from October 31, 2003 due to approximately \$3.2 million more in product receivables offset by a decline of government accounts receivable totaling \$0.5 million. The increase in product receivables is due to greater milestone billings to customers consistent with the expanded product backlog. We bill our fuel cell contracts based upon certain milestones that generally commence with contract signing and extend to commissioning of a completed power plant. We generally bill our government contracts on a monthly basis as costs are incurred. As revenues increase or decrease, billings and accounts receivable will increase or decrease as well.

Accounts Payable and Accrued Expenses

Accounts payable and accrued expenses combined have increased by approximately \$2.7 million since October 31, 2003 due to the timing of inventory payments related to our current production schedule. In addition we had accrued approximately \$0.8 million in severance costs as of October 31, 2004 related to our sale of the SOFC business to Versa.

Investing Activities: We acquired Global on November 3, 2003 by issuing, in total, approximately 8.2 million common and exchangeable shares. In connection with the acquisition, we acquired \$55.8 million of cash and investments. The cash acquired from Global was offset by approximately \$2.8 million of transaction and professional fees. In May 2004, we completed our sale of the Global entity and its TEG product line for net proceeds of approximately \$16.0 million.

Capital expenditures for the year ended October 31, 2004 were approximately \$7.9 million compared to \$6.6 million in the prior period. Reductions in systems and infrastructure spending during fiscal 2004 have been offset by capital expenditures totaling approximately \$4.7 million related to power plants being built for power purchase agreements. In addition, there were capital expenditures totaling approximately \$1.0 million relating to one DFC300A that we have provided to the Department of Defense (DoD) Fuel Cell Test and Evaluation Center (FC*Tec*).

Financing Activities: During the year ended October 31, 2004, we generated \$2.7 million from financing activities through the exercise of stock options, partially offset by repayments of debt and preferred dividends. This compares with \$0.5 million generated in the year ended October 31, 2003.

Commitments and Significant Contractual Obligations

A summary of our significant future commitments and contractual obligations as of October 31, 2004 and the related payments by fiscal year is summarized as follows (in thousands):

	Payments Due by Period												
		Less											
				than		1 - 3		3 - 5		than			
Contractual Obligation:		Total		1 Year		Years		Years		5 Years			
Lease commitments ⁽¹⁾	\$	5,222	\$	1,328	\$	1,751	\$	1,545	\$	598			
Term loan (principal and interest)		1,580		433		864		283					
Purchase commitments ⁽²⁾		14,855		14,734		121							
Preferred dividends payable ^{(3) (4)}		20,452		379		758		758		18,557			
Totals	\$	42,109	\$	16,874	\$	3,494	\$	2,586	\$	19,155			

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

- (3) Quarterly dividends of Cdn.\$312,500 accrue on the Series 1 preferred shares (subject to possible reduction pursuant to the terms of the Series 1 preferred shares on account of increases in the price of FuelCell's common stock). We have agreed to pay a minimum of Cdn.\$500,000 in cash or common stock annually to Enbridge, Inc., the holder of the Series 1 preferred shares, so long as Enbridge holds the shares. Interest accrues on cumulative unpaid dividends at a 2.45 percent quarterly rate, compounded quarterly, until payment thereof. Cumulative unpaid dividends and interest at October 31, 2004 were approximately \$2.8 million. For the purposes of this disclosure, we have assumed that the minimum dividend payments would be made through 2010. In 2010, we would be required to pay any unpaid and accrued dividends. From 2010 through 2020, we would be required to pay annual dividend amounts totaling Cdn.\$1.25 million.
- (4) We have assumed a constant exchange rate for the purposes of this disclosure at 0.76 U.S. dollars to 1.0 Canadian dollar.

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

On June 29, 2000, we entered into a loan agreement, secured by machinery and equipment, and have borrowed an aggregate of \$2.2 million under the agreement. The loan is payable over seven years, with payments of interest only for the first six months and then repaid in monthly installments over the remaining six and one-half years with interest computed annually based on the ten-year U.S. Treasury note plus 2.5 percent. Our current interest rate at July 31, 2004 is 7.2 percent and the outstanding principal balance on this loan is approximately \$1.5 million.

Approximately \$0.6 million of our cash and cash equivalents have been pledged as collateral for certain banking relationships in which we participate.

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 in an agreed ratio with the government agency. For example, our DOE sponsored demonstration of our two-megawatt DFC 3000 power plant operating on synthesis gas derived from coal has a total project value of \$34.5 million. The DOE will reimburse us 50 percent of the cost on this project and we will incur the balance. Thus, over the life of this program and assuming that funding is approved annually by Congress, our share of the total research and development expenditures would be approximately \$17.3 million for this program. As of October 31, 2004, our research and development sales backlog totaled \$16.4 million. As this backlog is funded in future periods, we will incur additional research and development cost-share totaling approximately \$15.5 million for which we would not be reimbursed by the government.

Product Sales Contracts

Our fuel cell power plant products are in the initial stages of development and market acceptance. As such, costs to manufacture and install our products exceed current market prices. As of October 31, 2004, we had product sales backlog of approximately \$26.3 million. We do not expect sales from this backlog to be profitable.

RECENT ACCOUNTING PRONOUNCEMENTS

In December 2004, the Financial Accounting Standards Board (FASB) issued Statement of Financial Accounting Standards (SFAS) No. 123 (revised 2004) (SFAS No. 123R), "Share-Based Payment" which revised SFAS No. 123, "Accounting for Stock-Based Compensation. This statement supercedes APB Opinion No. 25, "Accounting for Stock Issued to Employees." The revised statement addresses the accounting for share-based payment transactions with employees and other third parties, eliminates the ability to account for share-based compensation transactions using APB 25 and requires that the compensation costs relating to such transactions be recognized in the consolidated statement of operations. The revised statement is effective as of the first interim period beginning after June 15, 2005. We are currently evaluating the provisions of SFAS No. 123R and will adopt it on August 1, 2005 as required.

In November 2004, the FASB ratified the consensus reached by the Emerging Issues Task Force (EITF), on Issue No. 03-13, "Applying the Conditions in Paragraph 42 of FASB Statement No. 144 in Determining Whether to Report Discontinued Operations". The Issue provides a model to assist in evaluating (a) which cash flows should be considered in the determination of whether cash flows of the disposal component have been or will be eliminated from the ongoing operations of the entity and (b) the types of continuing involvement that constitute significant continuing involvement in the operations of the disposal component. Should significant continuing ongoing involvement exist, then the disposal component shall be reported in the results of continuing operations on the consolidated statements of operations and cash flows. We applied the provisions of this accounting standard to our financial statements.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs," which amends the guidance in ARB No. 43, Chapter 4, "Inventory Pricing," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material. This Statement requires that those items be recognized as current-period charges regardless of whether they meet the criterion of "so abnormal." In addition, this Statement requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. We are currently evaluating the provisions of SFAS No. 151 and will adopt it on November 1, 2005, as required.

In December 2003, the FASB issued FIN No. 46R, "Consolidation of Variable Interest Entities," which requires an entity to consolidate a variable interest entity if it is designated as the primary beneficiary of that entity even if the entity does not have a majority of voting interests. A variable interest entity is generally defined as an entity where its equity is inadequate to finance its activities or where the owners of the entity lack the risk and rewards of ownership. We have evaluated the provisions of FIN No. 46R, as required, and determined that we did not have any material variable interest entities that require consolidation into our financial statements.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Exposure

Our exposure to market risk for changes in interest rates, relates primarily to our investment portfolio and long term debt obligations. Our investment portfolio includes both short-term United States Treasury instruments with maturities averaging three months or less, as well as U.S. Treasury notes with fixed interest rates with maturities of up to twenty months. Cash is invested overnight with high credit quality financial institutions. Based on our overall interest rate exposure at October 31, 2004, including all interest rate sensitive instruments, a near-term change in interest rate movements of 1 percent would affect our results of operations by approximately \$0.5 million annually.

Foreign Currency Exchange Risk

We are subject to foreign exchange risk although we have taken steps to mitigate those risks where possible. As of October 31, 2004 approximately \$2.4 million (or 2 percent) of our total cash, cash equivalents and investments was in currencies other than U.S. dollars.

Our functional currency is the U.S. dollar as is our foreign subsidiary FuelCell Energy, Ltd. as the majority of our cash is invested in U.S. dollar investments.

During the year ended October 31, 2004, we recognized a foreign exchange gain totaling \$0.5 million which has been recorded as a component of interest and other income on our consolidated statement of operations. 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 hedging activities. We do not enter into derivative financial instruments. 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. Consequently, isolating the effect of changes in currency does not incorporate these other important economic factors.

BUSINESS

FuelCell Energy, Inc. is a world leader in the development and manufacture of fuel cell power plants for clean, efficient and reliable electric power generation. We have been developing fuel cell technology since our founding in 1969. We are currently commercializing our core carbonate fuel cell products (Direct FuelCell[®] or DFC[®] Power Plants), offering stationary applications for commercial and industrial customers and continuing to develop our next generation of carbonate fuel cell products. In addition, we are beginning the development of another high temperature

fuel cell system, planar solid oxide fuel cell (SOFC) technology, as a prime contractor in the U.S. Department of Energy's (DOE) Solid State Energy Conversion Alliance (SECA) Program and through our 42 percent ownership interest in Versa Power Systems (Versa).

Direct FuelCell (DFC) Power Plants

Increasing worldwide demand for reliable power presents significant market opportunities for our core distributed generation products. Our proprietary carbonate DFC power plants electrochemically produce electricity directly from readily available hydrocarbon fuels, such as natural gas and wastewater treatment gas. We believe our products offer significant advantages compared to other power generation technologies, including:

- · High fuel efficiency;
- · Ultra-clean emissions;
- · Improved reliability;
 - Quiet operation;
- · Flexible siting and permitting requirements;

· Scalability;

- Ability to provide electricity and heat for cogeneration applications, such as district heating, process steam, hot water and absorption chilling for air conditioning;
- Potentially lower operating, maintenance and generation costs than alternative distributed power generation technologies; and
- Because our DFC power plants produce hydrogen from readily available fuels such as natural gas and wastewater treatment gas, they can be used to cost-effectively cogenerate hydrogen as well as electricity and heat.

Our current products, the DFC300A, DFC1500 and DFC3000, are rated in capacity at 250 kW, 1 MW and 2 MW, respectively, and are scalable for distributed applications up to 10 MW or larger. Our products are designed to meet the base load power requirements of a wide range of commercial and industrial customers including wastewater treatment plants (municipal, such as sewage treatment facilities, and industrial, such as breweries and food processors), telecommunications/data centers, manufacturing facilities, office buildings, hospitals, universities, prisons, mail processing facilities, hotels and government facilities, as well as in grid support applications for utility customers. Through January 10, 2005, over 55 million kWh of electricity has been generated from power plants incorporating our DFC technology at customer sites throughout the world.

We see significant market potential for our DFC products. In October 2004, Energy User News reported that Allied Business Intelligence (ABI) projected distributed generation to the grid may increase to 200,000 MW worldwide by 2011 compared with 65,000 MW currently, with 6 percent or 12,000 MW from fuel cells. A year earlier, ABI reported that global stationary fuel cell cumulative shipments would rise from 55 MW cumulative through 2003 to nearly 18,000 MW cumulative through 2013, according to its moderate forecast. Another study, prepared by the DOE/Energy Information Administration (EIA) in 2000, estimated the potential market for combined heat and power (CHP) plant installations in the United States to be greater than 77,000 MW. This includes 6,500 MW for hotels/motels, 8,000 MW for hospitals, 19,000 MW for schools/colleges/universities, and over 18,600 MW for office buildings.

We have invested more than \$450 million in the development of our fuel cell technology, including funding from various U.S. government agencies such as the DOE and the Environmental Protection Agency. Our primary focus is carbonate fuel cell technology, which we have advanced from the laboratory into standard DFC products. We believe we have established a leading position for our DFC products in the commercial distributed generation marketplace due to a number of factors, including:

- We are selling 'ultra-clean' high-temperature fuel cell power plants for stationary base load power, which provide high fuel efficiency and high-value waste heat for cogeneration applications.
- We have strong global distribution partners, including original equipment manufactures (OEMs) and energy service companies (ESCOs), with expertise in selling and marketing energy products and services to commercial and industrial customers worldwide.
 - We obtained commercial product certifications for safety, interconnection, installation and performance.
- We are operating a fleet of DFC power plants at customer sites throughout the world, with a backlog that we expect will double the fleet in service in the next 12-18 months.
- · We have established production facilities, with equipment in place to produce 50 MW of DFC products annually.
- We achieved our 2004 value-engineering cost reduction target of 25 percent and are confident we can continue to reduce costs.

 $\cdot\,$ We have expanded our sales and service capabilities to support our DFC products.

• We have a strong balance sheet, with over \$240 million in cash, cash equivalents and investments (U.S. Treasury Securities) as of November 18, 2004 to support our growth.

We believe there are positive trends withi