

FUELCELL ENERGY INC

Form 424B5

January 16, 2014

Table of Contents

The information in this preliminary prospectus supplement and the accompanying prospectus, relating to an effective registration statement under the Securities Act of 1933, is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 16, 2014

**Filed Pursuant to Rule 424(b)(5)
Registration No. 333- 189185**

PROSPECTUS SUPPLEMENT

(To Prospectus dated July 18, 2013)

Shares of Common Stock

We are offering shares of our common stock in this offering.

Our common stock is listed on The NASDAQ Global Market under the symbol FCEL . On January 15, 2014, the last reported sale price of our common stock was \$1.68 per share.

Investing in our common stock involves significant risks. See Risk Factors beginning on page S-6 of this prospectus supplement and page 5 of the accompanying prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions	\$	\$
Proceeds, before expenses, to us	\$	\$

We estimate the total expenses of this offering, excluding the underwriting discounts and commissions, will be approximately \$. We have granted the underwriters an option for a period of 30 days from the date of this prospectus supplement to purchase up to a total of additional shares of our common stock at the public offering price per share, less the underwriting discounts and commissions, to cover any over-allotments.

We anticipate that delivery of the shares will be made on or about January , 2014, subject to customary closing conditions.

Sole Book-Running Manager

Stifel

Co-Lead Manager

Cowen and Company

Co-Manager

FBR Capital Markets & Co.

The date of this prospectus supplement is January , 2014.

Table of Contents

TABLE OF CONTENTS

	Page
PROSPECTUS SUPPLEMENT	
<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	S-2
<u>PROSPECTUS SUPPLEMENT SUMMARY</u>	S-3
<u>THE OFFERING</u>	S-5
<u>RISK FACTORS</u>	S-6
<u>FORWARD-LOOKING STATEMENTS</u>	S-17
<u>SELECTED FINANCIAL DATA</u>	S-18
<u>USE OF PROCEEDS</u>	S-18
<u>DESCRIPTION OF CAPITAL STOCK</u>	S-18
<u>DILUTION</u>	S-18
<u>UNDERWRITING</u>	S-19
<u>LEGAL MATTERS</u>	S-22
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	S-22
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	S-23
PROSPECTUS	
<u>FORWARD-LOOKING STATEMENTS</u>	1
<u>ABOUT THIS PROSPECTUS</u>	1
<u>FUELCELL ENERGY, INC.</u>	1
<u>RISK FACTORS</u>	3
<u>RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED DIVIDENDS</u>	16
<u>USE OF PROCEEDS</u>	16
<u>DESCRIPTION OF DEBT SECURITIES</u>	16
<u>DESCRIPTION OF CAPITAL STOCK</u>	23
<u>DESCRIPTION OF WARRANTS</u>	33
<u>DESCRIPTION OF UNITS</u>	35
<u>PLAN OF DISTRIBUTION</u>	36
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT</u>	
<u>LIABILITIES</u>	38
<u>LEGAL MATTERS</u>	38
<u>EXPERTS</u>	38
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	38
<u>INCORPORATION BY REFERENCE</u>	38

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the securities we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein are part of a shelf registration statement that we filed with the Securities and Exchange Commission (the "SEC"). Under the shelf registration process, we may offer from time to time shares of our common stock and other securities up to an aggregate amount of \$150,000,000, of which this offering is a part. This prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein include important information about us, our securities being offered and other information you should know before investing. You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we authorized to be delivered to you, as well as the additional information described under "Where You Can Find Additional Information" on page S-22 of this prospectus supplement and "Incorporation of Certain Information by Reference" on page S-23 of this prospectus supplement before investing in our securities.

To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or in any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus supplement or the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus, any related free writing prospectus that we authorized to be distributed to you and the documents incorporated by reference herein and therein. We have not, and the underwriters have not, authorized anyone to provide you with information that is different. If anyone provides you with different or inconsistent information, you should not rely on it. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we have authorized to be delivered to you is accurate only as of their respective dates, regardless of the time of delivery of such documents or of any sale of securities. Our business, financial condition, results of operations and prospects may have changed since those dates. You should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the United States. Furthermore, you should not consider this prospectus supplement or the accompanying prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

Unless the context requires otherwise, in this prospectus supplement and the accompanying prospectus the terms FuelCell, FuelCell Energy, the Company, we, us, our and similar names refer to FuelCell Energy, Inc.

subsidiaries.

S-2

Table of Contents

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights certain information about us, this offering and information appearing elsewhere in this prospectus supplement and in the accompanying prospectus and in the documents we incorporate by reference. This summary is not complete and does not contain all of the information that you should consider before investing in shares of our common stock. The following summary is qualified in its entirety by, and should be read in conjunction with, the more detailed information and financial statements and notes thereto appearing elsewhere in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein. Before you decide to invest in shares of our common stock, to fully understand this offering and its consequences to you, you should carefully read the entire prospectus supplement and the accompanying prospectus carefully, including the risk factors beginning on page S-6 of this prospectus supplement and beginning on page 3 of the accompanying prospectus, and the consolidated financial statements and related notes included in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein.

Overview

We are a leading integrated fuel cell company with a growing global presence. We design, manufacture, sell, install and service ultra-clean, highly efficient stationary fuel cell power plants for distributed baseload power generation. Our power plants offer scalable on-site power and utility grid support, helping customers solve their energy, environmental and business challenges. FuelCell Energy was founded in Connecticut in 1969 as an applied research organization, providing contract research and development. The Company went public in 1992, raising capital to develop and commercialize fuel cells, and reincorporated in Delaware in 1999. We began selling stationary fuel cell power plants commercially in 2003. Our plants operate in more than 50 locations worldwide in nine countries and have generated more than two billion kilowatt hours (kWh) of electricity, which is equivalent to powering more than 181,000 average size U.S. homes for one year. Our steadily growing installed base and backlog exceeds 300 megawatts (MW).

We provide comprehensive turn-key power generation solutions to our customers including installation of the power plants as well as operating and maintaining the plants under multi-year service agreements. We target large-scale power users with our megawatt-class installations. As reference, one megawatt is adequate to power approximately 1,000 average size U.S. homes. Our customer base includes electric utility companies, municipalities, universities, government entities and businesses in a variety of commercial and industrial enterprises. Our leading geographic markets are South Korea and the United States and we are pursuing expanding opportunities in Asia, Europe, and Canada.

Our value proposition provides highly efficient and environmentally friendly power generation with easy-to-site stationary fuel cell power plants. The power plants are located next to or within populated buildings as they are virtually pollutant free, operate quietly and without vibrations, and have modest space requirements. Locating the power generation near the point of use provides many advantages including less reliance or even avoidance of the transmission grid leading to enhanced energy security and power reliability. Our power plants provide electricity priced competitively to grid-delivered electricity in certain high cost regions and our strategy is to continue to reduce costs, which is expected to lead to wider adoption.

Our Company vision is to provide ultra-clean, highly efficient, reliable distributed generation baseload power at a cost per kilowatt hour that is less than the cost of grid-delivered electricity. We have a clear path to attaining this vision which we believe can be achieved with a production volume of approximately 210 megawatts annually.

Our Direct FuelCell[®] (DFC[®]) power plants use a variety of available fuels to produce electricity electrochemically without combustion in a process that is highly efficient, quiet and produces virtually no pollutants. DFC power plants generate more power and fewer emissions for a given unit of fuel than combustion-based power generation of a similar size, making them economical and environmentally responsible power generation solutions. In addition to electricity, our DFC power plants produce high quality heat that can be used for heating, cooling and other purposes; when used in Combined Heat and Power (CHP) configurations, system efficiencies can reach 90 percent. Unlike solar and wind power, our DFC power plants operate continuously regardless of geography, weather or time of day.

S-3

Table of Contents

We service two primary markets: ultra-clean power (fuel cells operating on clean natural gas) and renewable power (fuel cells operating on renewable biogas). Our strategy is to expand in the 11 distinct vertical submarkets we have identified and further penetrate our key geographic markets while continuing to reduce product costs and expand our services business created by our increasing installed base of customers. We believe that the sale of higher volumes of our products will further reduce costs and increase margins.

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.

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, kilowatt (kW) means 1,000 watts; megawatt (MW) means 1,000,000 watts; and kilowatt hour (kWh) is equal to 1 kW of power supplied to or taken from an electric circuit steadily for one hour. All dollar amounts are in U.S. dollars unless otherwise noted.

Recent Developments

Conversions of 8.0% Senior Unsecured Convertible Notes

In January 2014, certain investors elected to convert a total of \$7.0 million in principal of \$30.0 million in aggregate principal of the 8.0% Senior Unsecured Convertible Notes (the *Notes*). Under the terms of the Notes, they are convertible into shares of the Company's common stock at a conversion rate of 645.1613 shares of common stock per \$1,000 principal amount of Notes, equivalent to a conversion price of approximately \$1.55 per share of common stock plus a *make-whole* payment in regard to interest. As a result of these conversions, the Company retired \$7.0 million of outstanding principal and issued 5,764,794 shares of common stock. The total remaining principal outstanding on the Notes as of January 15, 2014 is \$23,000,000.

Fiscal 2014 Financial Outlook

In December 2013, the Company provided the following revenue guidance for 2014 on its quarterly investor call. Product sales are expected to increase and be approximately 15 percent higher than the \$145 million reported in 2013. This guidance is based on a full year production run rate of 70 megawatts and closing at least 30 megawatts of new orders. Quarterly results may vary based on the timing of order closure and shipments. Service agreements and license revenues are expected to average between \$4 million to \$6 million per quarter on new agreements and increased license revenue. Advanced technologies contract revenues for 2014 are anticipated to be in the range of \$3 million to \$4 million per quarter which is consistent with the 2013 level.

The Company reiterates this guidance and provides a further update that total revenues for the first quarter of 2014 are expected to be in the range of \$39 to \$44 million depending on the timing of certain anticipated product sales.

Table of Contents

THE OFFERING

Common stock offered by us	shares
Over-allotment option	shares
Common stock to be outstanding after this offering	shares
Use of proceeds	We intend to use the net proceeds from this offering for project development, project financing, working capital support and general corporate purposes. Pending use of the net proceeds, we intend to invest the net proceeds temporarily in money-market funds or U.S. treasuries until we use them for their stated purpose. See Use of Proceeds on page S-18 of this prospectus supplement.
Risk factors	See Risk Factors beginning on page S-6 of this prospectus supplement and on page 3 of the accompanying prospectus for a discussion of factors you should consider carefully when making a decision to invest in our common stock.
NASDAQ Global Market symbol	FCEL

The number of shares of our common stock to be outstanding immediately after this offering as shown above assumes that all of the shares offered hereby are sold at a price of \$ _____ per share and is based on 205,379,875 shares outstanding as of December 31, 2013. This number of shares excludes the following:

19,354,839 shares issuable as of December 31, 2013 for conversion of the remaining outstanding 8% Convertible Unsecured Notes, excluding any shares that could be used to satisfy interest amounts due if not paid in cash;

approximately 5,448,512 shares of our common stock issuable upon conversion of 64,020 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock outstanding;

73,438 shares of our common stock issuable under Series 1 preferred shares issued by FuelCell Energy, Ltd., our wholly-owned Canadian subsidiary (formerly known as FCE Canada, Inc.) to satisfy conversion requirements;

3,101,364 shares of our common stock issuable upon the exercise of options outstanding at December 31, 2013 under our equity plans;

5,000,000 shares of our common stock issuable upon vesting and exercise of warrants issued as part of co-marketing agreement for the marketing and sales of our power plants;

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

1,063,275 shares of our common stock available as of December 31, 2013, for future issuance under our equity plans;

shares issuable upon exercise of the underwriters' over-allotment option in this offering, if any;

425,250 shares of our common stock available as of December 31, 2013, for future issuance under our employee stock purchase plan;

62,280 shares of our common stock available for employee bonuses; and

shares of our common stock and other securities up to an aggregate amount of \$150,000,000 pursuant to a shelf registration statement that we have filed with the SEC, of which \$129,026,368 remains.

S-5

Table of Contents**RISK FACTORS**

Investing in our common stock involves a high degree of risk. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. Before purchasing our common stock, you should carefully consider the following risk factors, as well as all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference, including our consolidated financial statements and the related notes. If any of the following risks actually occur, our business, financial condition, or results of operations could be materially and adversely affected. In such cases, the trading price of our common stock could decline, and you may lose all or part of your investment.

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

We have been transitioning from a contract research and development company to a commercial products developer, manufacturer and services provider. As such, we have not been profitable since our fiscal year ended October 31, 1997. We expect to continue to incur net losses and generate negative cash flows until we can produce sufficient revenues to cover our costs. We may never become profitable. Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future. For the reasons discussed in more detail below, there are substantial uncertainties associated with our achieving and sustaining profitability. We have, from time to time, sought financing in the public markets in order to fund operations. Our future ability to obtain such financing, if required, could be impaired by a variety of factors, including, but not limited to, the price of our common stock and general market conditions.

Our cost reduction strategy may not succeed or may be significantly delayed, which may result in our inability to deliver improved margins.

Our cost reduction strategy is based on the assumption that continued increases in production will result in economies of scale. In addition, our cost reduction strategy relies on advancements in our manufacturing process, global competitive sourcing, engineering design and technology improvements (including stack life and projected power output). Failure to achieve our cost reduction targets could have a material adverse effect on our results of operations and financial condition.

Our products compete with products using other energy sources, and if the prices of the alternative sources are lower than energy sources used by our products, sales of our products will be adversely affected. Volatility of electricity and fuel prices may impact sales of our products and services in the markets in which we compete.

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

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

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

S-6

Table of Contents

Financial markets worldwide have experienced increased volatility and instability which may have a material adverse impact on our Company, our customers and our suppliers.

Financial market volatility can affect both the debt, equity and project finance markets. This may impact the amount of financing available to all companies, including companies with substantially greater resources, better credit ratings and more successful operating histories than ours. It is impossible to predict future financial market volatility and instability and the impact on our Company and it may have a materially adverse effect on us for a number of reasons, such as:

The long-term nature of our sales cycle can require long lead times between application design, order booking and product fulfillment. For this, we often require substantial cash down payments in advance of delivery. Our growth strategy assumes that financing will be available for the Company to finance working capital or our customers to provide down payments and to pay for our products. Financial market issues may delay, cancel or restrict the construction budgets and funds available to the Company or our customers for the deployment of our products and services.

Projects using our products are, in part, financed by equity investors interested in tax benefits as well as by the commercial and governmental debt markets. The significant volatility in the U.S. and international stock markets since 2008 has caused significant uncertainty and may result in an increase in the return required by investors in relation to the risk of such projects.

If we, our customers and suppliers cannot obtain financing under favorable terms, our business may be negatively impacted.

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

The Company applies the percentage of completion revenue recognition method to certain product sales contracts which are subject to estimates. On a quarterly basis, the Company performs a review process to help ensure that total estimated contract costs include estimates of costs to complete that are based on the most recent available information. The percentage of completion for the customer contracts based on this cost analysis is then applied to the total customer contract values to determine the total revenue to be recognized to date.

We have contracted under long-term service agreements with certain customers to provide service on our products over terms ranging from one to 20 years. Under the provisions of these contracts, we provide services to maintain, monitor, and repair customer power plants to meet minimum operating levels. Pricing for service contracts is based upon estimates of future costs including future stack replacements. While we have conducted tests to determine the overall life of our products, we have not run our products over their projected useful life prior to large-scale commercialization. As a result, we cannot be sure that our products will last to their expected useful life, which could result in warranty claims, performance penalties, maintenance and stack replacement costs in excess of our estimates and losses on service contracts.

The Company has one customer who purchases power under a power purchase agreement (PPA), whereby the customer agrees to purchase power from our fuel cell power plants at negotiated rates. Electricity rates are generally a

function of the customer's current and future electricity pricing available from the grid. Should electricity rates decrease or operating costs increase from our original estimates, our results of operations could be negatively impacted. We are not required to produce minimum amounts of power under this PPA agreement. We provide termination rights by giving written notice to the customer, subject to certain exit costs.

We extend product warranties, which could affect our operating results.

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs based on our historical warranty claim experience, however actual future warranty expenses may be greater than we've assumed in our estimates. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects in excess of our estimates.

S-7

Table of Contents

Our products are complex and could contain defects and may not operate at expected performance levels which could impact sales and market adoption of our products or result in claims against us.

We develop complex and evolving products. Our initial installations were demonstration power plants intended to test the technology in real-world applications. We learned extensively from these demonstration installations, enhancing the technology and improving the operation of the power plants. Our first commercial Direct FuelCell power plant installation in 2003 had a rated power output of 250 kW and a three year stack life. Most of these 250 kW installations were terminated at contract conclusion or earlier as the costs were too high to justify continuation and the customer's power needs did not support a sub-megawatt-class power plant. Certain of these early product designs did not meet our expectations resulting in mixed performance history, impacting the adoption rate of our products. Costs are lower for our newer megawatt-class plants compared to sub-megawatt plants due to scale. With the growing expertise gained from an expanding installed base, we continue to advance the capabilities of the fuel cell stacks and are now producing stacks with a rated power output of 350 kW and an expected five year life.

We have limited field operating experience on our products, and despite experience gained from our growing installed base and testing performed by us, our customers and our suppliers, issues may be found in existing or new products. This could result in a delay in recognition or loss of revenues, loss of market share or failure to achieve broad market acceptance. The occurrence of defects could also cause us to incur significant warranty, support and repair costs, could divert the attention of our engineering personnel from our product development efforts, and could harm our relationships with our customers. The occurrence of these problems could result in the delay or loss of market acceptance of our products and would likely harm our business. Defects or performance problems with our products could result in financial or other damages to our customers. From time to time, we have been involved in disputes regarding product warranty issues. Although we seek to limit our liability, a product liability claim brought against us, even if unsuccessful, would likely be time consuming and could be costly to defend. Our customers could also seek and obtain damages from us for their losses. We have reserved for potential damages related to performance problems, however actual results may be different than the assumptions used in our reserve calculations.

We currently face and will continue to face significant competition.

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

Several companies are involved in fuel cell development, although we believe we are the only domestic company engaged in significant manufacturing and commercialization of carbonate fuel cells. Emerging fuel cell technologies (and companies developing them) include PEM fuel cells (Ballard Power Systems, Inc.), phosphoric acid fuel cells (ClearEdge Power) and solid oxide fuel cells (LG and Bloom Energy). Each of these competitors has the potential to capture market share in our target markets. There are also other potential fuel cell competitors internationally that could capture market share.

Other than fuel cell developers, we must also compete with companies that manufacture more mature combustion-based equipment, including various engines and turbines, and have well-established manufacturing, distribution, and operating and cost features. Electrical efficiency of these products can be competitive with our DFC Power Plants in certain applications. Significant competition may also come from gas turbine companies.

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

POSCO Energy currently owns approximately 15 percent of our outstanding common stock, which could make it difficult for a third party to acquire our common stock. POSCO Energy is also a licensee of our technology and purchaser of our products. Therefore, it may be in their interests to possess substantial influence over matters concerning our overall strategy and technological and commercial development.

S-8

Table of Contents

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

Our first commercial power plant installation was in 2003 so we have limited experience manufacturing our products on a commercial basis. With full utilization under its current configuration, our overall manufacturing process has a production capacity of 100 MW per year depending on product mix and other factors. We expect that we will further increase our manufacturing capacity based on market demand. We cannot be sure that we will be able to achieve any planned increases in production capacity. Also, as we scale up our production capacity, we cannot be sure that unplanned failures or other technical problems relating to the manufacturing process will not occur.

Even if we are successful in achieving our planned increases in production capacity, we cannot be sure that we will do so in time to satisfy the requirements of our customers. Our failure to develop advanced manufacturing capabilities and processes, or meet our cost goals, could have a material adverse effect on our business prospects, results of operations and financial condition.

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

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

Our plans are dependent on market acceptance of our products.

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

the cost competitiveness of our fuel cell products, including availability and output expectations and total cost of ownership;

the future costs of natural gas and other fuels used by our fuel cell products;

customer reluctance to try a new product;

the market for distributed generation;

local permitting and environmental requirements; and

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

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

S-9

Table of Contents

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

We contract with a concentrated number of customers for the sale of products and for research and development contracts. This includes POSCO Energy, which is a related party and owns approximately 15 percent of the outstanding common shares of the Company.

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

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

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

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

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

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

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

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

Many of our U.S. patents relating to our fuel cell technology are the result of government-funded research and development programs. We own all patents resulting from research funded by our DOE contracts awarded to date. Under current regulations, patents resulting from research funded by government agencies other than the DOE are owned by us.

S-10

Table of Contents

Nine U.S. patents that we own have resulted from government-funded research and are subject to the risk of exercise of march-in rights by the government. March-in rights refer to the right of the U.S. government or a government agency to exercise its non-exclusive, royalty-free, irrevocable worldwide license to any technology developed under contracts funded by the government if the contractor fails to continue to develop the technology. These march-in rights permit the U.S. government to take title to these patents and license the patented technology to third parties if the contractor fails to utilize the patents. In addition, one of our DOE-funded research and development agreements also required 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.

We now qualify as a large business , which could adversely affect our rights to own future patents under DOE-funded contracts.

We now qualify as a large business under DOE contracts. This allows us to own the patents that we develop under new DOE contracts if we obtain a waiver from DOE. A large business under applicable government regulations generally consists of more than 500 employees averaged over a one year period. We will no longer own future patents we develop under new contracts, grants or cooperative agreements funded by the DOE, unless we obtain a patent waiver from the DOE. Should we not obtain a patent waiver and outright ownership, we would nevertheless retain exclusive rights to any such patents, so long as we continue to commercialize the technology covered by the patents.

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

We cannot assure you that we will enter into partnerships that are consistent with, or sufficient to support, our commercialization plans, and our growth strategy or that these relationships will be on terms favorable to us. Even if we enter into these types of relationships, we cannot assure you that the partners with which we form relationships will focus adequate resources on selling our products or will be successful in selling them. Some of these arrangements have or will require that we grant exclusive rights to companies in defined territories. These exclusive arrangements could result in our being unable to enter into other arrangements at a time when the partner with which we form a relationship is not successful in selling our products or has reduced its commitment to marketing our products. In addition, future 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 partnerships or relationships, the failure of these partners to assist us with the deployment of our products may adversely affect our results of operations and financial condition.

We depend on third party suppliers for the development and supply of key raw materials and components for our products.

We use various raw materials and components to construct a fuel cell module, including nickel and stainless steel which are critical to our manufacturing process. We also rely on third-party suppliers for the balance-of-plant components in our products. Suppliers must undergo a qualification process, which takes four to twelve months. We continually evaluate new suppliers and we are currently qualifying several new suppliers. There are a limited number of suppliers for some of the key components of products. A supplier's failure to develop and supply components in a timely manner, supply components that meet our quality, quantity or cost requirements, 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 whether we will be able to maintain long-term supply relationships with our critical suppliers or secure new long-term supply relationships, or whether such relationships will be on terms that will allow us to achieve our objectives. Our business prospects, results of operations and financial condition could be harmed if we fail to secure long-term relationships with entities that will supply the required components for our Direct FuelCell products.

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

Failure to protect our existing intellectual property rights may result in the loss of our exclusivity or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation, or be enjoined from using such intellectual property. We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. In addition, we have licensed much of our intellectual property to carefully selected third parties, and we depend on those third parties to also protect our intellectual property rights. As of October 31, 2013, we had 86 current U.S. patents and 63 international patents covering our fuel cell technology. The U.S. patents have an average remaining life of approximately 10.6 years.

Table of Contents

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

We cannot assure you that any of the U.S. or international patents owned by us or other patents that third parties license to us will not be invalidated, circumvented, challenged, rendered unenforceable or licensed to others, or any of our pending or future patent applications will be issued with the breadth of claim coverage sought by us, if issued at all. In addition, effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in certain foreign countries.

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

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

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

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

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

therefore, our business prospects, results of operations and financial condition.

S-12

Table of Contents

Our management may be unable to manage rapid growth effectively.

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

We may be affected by environmental and other governmental regulation.

We are subject to various federal, state and local laws and regulations relating to, among other things, land use, safe working conditions, handling and disposal of hazardous and potentially hazardous substances and emissions of pollutants into the atmosphere, and we could be required to incur additional costs to upgrade equipment and to comply with more stringent requirements. In addition, it is possible that industry-specific laws and regulations will be adopted covering matters such as transmission scheduling, distribution, and the characteristics and quality of our products, including installation and servicing. These laws and regulations could limit the growth in the use of carbonate fuel cell products, decrease the acceptance of fuel cells as a commercial product and increase our costs and, therefore, the price of our products. Accordingly, compliance with existing or future laws and regulations could have a material adverse effect on our business prospects, results of operations and financial condition.

Utility companies may resist the adoption of distributed generation and could impose customer fees or interconnection requirements on our customers that could make our products less desirable.

Investor-owned utilities may resist adoption of distributed generation fuel cell plants as the power plants are disruptive to the utility business model that primarily utilizes large central generation power plants and associated transmission and distribution. On-site distributed generation that is on the customer-side of the electric meter competes with the utility. Distributed generation on the utility-side of the meter generally has power output that is significantly less than central generation power plants and may be perceived by the utility as too small to materially impact their business, limiting their interest. Additionally, perceived technology risk may limit utility interest in stationary fuel cell power plants.

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

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

Our business exposes us to the risk of harmful substances escaping into the environment, which could result 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 with respect to environmental damage claims, and in some instances, we may not be reimbursed at all. Our business is subject to numerous federal, state, and local laws and regulations that govern environmental protection and human health and safety. We believe that our businesses are operating in compliance in all material respects with applicable environmental laws and regulations, however these laws and regulations have changed frequently in the past and it is reasonable to expect additional and more stringent changes in the future.

S-13

Table of Contents

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, undertake investigations, remediation or other corrective action to address environmental conditions, or pay substantial damage claims.

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

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

We are subject to risks inherent in international operations.

Since we market our products both inside and outside the U.S., our success depends in part, on our ability to secure international customers and our ability to manufacture products that meet foreign regulatory and commercial requirements in target markets. Sales to customers located outside the U.S. accounts for a significant portion of our consolidated revenue. Sales to customers in South Korea represent the majority of our international sales. We have limited experience developing and manufacturing our products to comply with the commercial and legal requirements of international markets. In addition, we are subject to tariff regulations and requirements for export licenses, particularly with respect to the export of some of our technologies. We face numerous challenges in our international expansion, including unexpected changes in regulatory requirements, potential conflicts or disputes that countries may have to deal with, fluctuations in currency exchange rates, longer accounts receivable requirements and collections, difficulties in managing international operations, potentially adverse tax consequences, restrictions on repatriation of earnings and the burdens of complying with a wide variety of international laws. Any of these factors could adversely affect our results of operations and financial condition.

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, sale and service 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.

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

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

S-14

Table of Contents

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

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations (see Critical Accounting Policies and Estimates in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended October 31, 2013). Such methods, estimates and judgments are, by their nature, subject to substantial risks, uncertainties and assumptions, and factors may arise over time that could lead us to reevaluate our methods, estimates and judgments.

As we gain experience in future periods, management will continue to reevaluate its estimates for contract margins, service agreements, loss reserves, warranty, performance guarantees, liquidated damages and inventory reserves. Changes in those estimates and judgments could significantly affect our results of operations and financial condition. We may also adopt changes required by the Financial Accounting Standards Board and the Securities and Exchange Commission.

Our financial results can fluctuate significantly from quarter to quarter, which may negatively impact the price of our shares and/or cause significant variances in the prices at which our shares trade.

Our sales have fluctuated in the past and may fluctuate in the future from quarter to quarter and period to period, as a result of a number of factors including, without limitation: the size and timing of orders from customers; the timing of shipments; the length of new product and project development cycles; market acceptance of new technologies; changes in pricing policies or price reductions by us or our competitors; the timing of new product announcements and product introductions by us or our competitors; our success in expanding our sales and marketing programs; acceleration, deferral, or cancellation of customer orders and deliveries; and general market and economic factors. Because a significant percentage of our expenses are relatively fixed, a variation in the timing and mix of our sales can cause significant fluctuations in operating results from quarter to quarter. As a result, we believe that interim period-to-period comparisons of our results of operations are not necessarily meaningful and should not be relied upon as indications of future performance. Further, our historical operating results are not necessarily indicative of future performance for any particular period. In addition, it is possible that our operating results in future quarters may be below the expectations of public market analysts and investors. In such an event, the price of our Common Stock could be materially adversely affected.

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 commercialization milestones;

variations in our quarterly operating results from the expectations of securities analysts or investors;

downward revisions in securities analysts' estimates or changes in general market conditions;

announcements of technological innovations or new products or services by us or our competitors;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel;

investor perception of our industry or our prospects;

insider selling or buying;

demand for our common stock; and

general technological or economic trends.

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

Provisions of Delaware and Connecticut law and of our charter and by-laws and our outstanding securities 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. In addition, certain provision of our 8.0% Senior Unsecured Convertible Notes, our Series 1 Preferred Shares and our Series B preferred stock could make it more difficult or more expensive for a third party to acquire us. 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.

Table of Contents

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, or perceptions that those sales could occur, could adversely affect the prevailing market price of our common stock and our ability to raise capital in the future.

The rights of the Series 1 preferred shares and Series B preferred stock and the 8.0% Senior Unsecured Convertible Notes could negatively impact our cash flows and could dilute the ownership interest of our stockholders.

The terms of the Series 1 preferred shares issued by FCE FuelCell Energy, Ltd. (FCE Ltd.), our wholly-owned, indirect subsidiary, provide rights to the holder, Enbridge Inc. (Enbridge), which could negatively impact us.

The provisions of the Series 1 Preferred Shares require that FCE Ltd. make annual dividend payments totaling Cdn. \$1,250,000, including (i) annual dividend payments of Cdn. \$500,000 and (ii) annual return of capital payments of Cdn. \$750,000. These payments will end on December 31, 2020. Additional dividends accrue on cumulative unpaid dividends at a 1.25 percent quarterly rate, compounded quarterly, until payment thereof. On December 31, 2020 the amount of all accrued and unpaid dividends on the Series 1 Preferred Shares of Cdn. \$21.1 million and the balance of the principal redemption price of Cdn. \$4.4 million shall be paid to the holders of the Series 1 Preferred Shares. FCE Ltd. has the option of making dividend payments in the form of common stock or cash under the Series 1 Preferred Shares provisions.

We are also required to issue common stock to the holder of the Series 1 preferred shares if and when the holder exercises its conversion rights. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders. For example, assuming the holder of the Series 1 preferred shares exercises its conversion rights after July 31, 2020 and assuming our common stock price is \$1.41 (our common stock closing price on December 31, 2013) and an exchange rate of Cdn. \$1.07 to U.S. \$1.00 at the time of conversion, we would be required to issue approximately 3,102,905 shares of our common stock.

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

The terms of the 8.0% Senior Unsecured Convertible Notes provide that we have the option of making interest and repurchase payments either in cash or in common shares. To the extent that we determine to use shares for these purposes, the shares will be valued at a discount from their then-current market value. To the extent we issue common stock upon conversion or repurchase of, or payment of interest upon, the 8.0% Notes, the ownership interests of existing stockholders will be diluted. Any sales in the public market of the common stock issuable with respect to the 8.0% Notes could adversely affect prevailing market prices of our common stock. In addition, the existence of these securities may encourage short selling by market participants because the conversion of the 8.0% Notes could depress the price of our common stock.

Management will have broad discretion as to the use of the proceeds of this offering.

We have not designated the amount of net proceeds we will receive from this offering for any particular purpose. Accordingly, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds.

Investors in this offering will pay a much higher price than the book value of our common stock.

You will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering because the price per share of our common stock being offered hereby is substantially higher than the book value per share of our common stock. Based on the estimated public offering price of \$1.68 per share in this offering, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$1.41 per share in the net tangible book value of the common stock. See **Dilution** on page S-18 of this prospectus supplement for a more detailed discussion of the dilution you will incur in this offering.

S-16

Table of Contents

FORWARD-LOOKING STATEMENTS

Some of the statements contained in this prospectus supplement or incorporated by reference into this prospectus supplement are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are subject to the safe harbor created by the Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our expectations and projections about future events and financial trends affecting the financial condition and/or operating results of our business. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, the negative of these words, or similar expressions are intended to identify forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted under the heading Risk Factors below, in the filings incorporated herein by reference and in the accompanying prospectus. There are important factors that could cause actual results to be substantially different from the results expressed or implied by these forward-looking statements including, among other things:

our ability to become profitable and attain positive cash flow;

our ability to successfully implement our cost reduction strategy and increase our production;

our ability to increase manufacturing production;

the impact of competition and technological change on our business;

the effect of market conditions on our long-term power purchase and service agreements with our customers;

our ability to successfully market and commercialize our Direct FuelCell® products and our other products and product candidates;

our dependence on government research and development contracts and the effect that a negative government audit could have on our business;

our dependence on a limited number of third-party suppliers for our Direct FuelCell® products;

our dependence on our intellectual property and ability to protect our proprietary rights and operate our business without conflicting with the rights of others;

the effect that any intellectual property litigation or product liability claims may have on our business and operating and financial performance;

our ability to attract and retain key, qualified management and technical personnel;

the negative effect of the imposition of customer fees or interconnection requirements on our customers by utility companies;

the effect that environmental compliance claims or remediation requirements may have on our business and operating and financial performance; and

other factors set forth above under **Risk Factors** and in the accompanying prospectus, as well as in all filings incorporated by reference into this prospectus supplement.

We do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends.

Table of Contents**SELECTED FINANCIAL DATA**

Financial data from our filings with the SEC has been incorporated by reference.

Our Annual Report on Form 10-K for the fiscal period ended October 31, 2013 was filed with the SEC on January 6, 2014.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering, based on the sale of _____ shares of our common stock at the public offering price of \$ _____ per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately \$ _____ million (or approximately \$ _____ million if the underwriters' over-allotment option is exercised in full).

We currently intend to use the net proceeds of this offering for project development, project financing, working capital support and general corporate purposes. General corporate purposes may include capital expenditures, repayment of debt, payment of dividends and any other purposes. While we have estimated the particular uses for the net proceeds of this offering, we have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering for any purpose, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. Pending use of the net proceeds as described above, we intend to invest the net proceeds in money-market funds or U.S. treasuries until we use them for their stated purpose.

DESCRIPTION OF CAPITAL STOCK

The description of our common stock is set forth under the heading "Description of Capital Stock", beginning on page 36 of the accompanying prospectus.

DILUTION

If you purchase any of the shares of common stock offered by this prospectus supplement, you will experience dilution to the extent of the difference between the offering price per share of common stock you pay in this offering and the net tangible book value per share of our common stock immediately after this offering. Our unaudited net tangible book value as of October 31, 2013, was approximately \$33 million, or \$.16 per share of common stock. Net tangible book value per share is equal to our total tangible assets minus total liabilities, all divided by the number of shares of common stock outstanding. This calculation is on an "as converted" basis assuming conversion of preferred stock to common stock.

After giving effect to the assumed sale of 17,000,000 shares of common stock in this offering at the assumed public offering price of \$1.68 per share, and after deducting the underwriting commissions and our estimated offering expenses, our "as adjusted" net tangible book value as of October 31, 2013, would have been approximately \$59.7 million, or approximately \$0.27 per share of common stock. This represents an immediate increase in net tangible book value of approximately \$0.11 per share to existing stockholders and an immediate dilution of approximately \$1.41 per share to new investors. The following table illustrates this calculation on a per share basis:

Assumed Public Offering price per share	\$ 1.68
---	---------

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

Assumed net tangible book value per share as of October 31, 2013	\$ 0.16
Assumed increase per share attributable to this offering	\$ 0.11
Assumed as adjusted net tangible book value per share after this offering	\$ 0.27
Assumed dilution per share to new investors participating in this offering	\$ 1.41

S-18

Table of Contents

If the underwriters exercise in full their option to purchase 2,550,000 additional shares at the estimated public offering price of \$1.68 per share, the estimated as adjusted net tangible book value after this offering would be \$0.29 per share, representing an increase in net tangible book value of \$0.13 per share to existing shareholders and immediate dilution in net tangible book value of \$1.39 per share to investors participating in this offering.

The number of shares of common stock outstanding used for existing stockholders in both the table and calculations above is based on 201,832,352 shares outstanding as of October 31, 2013. This calculation is on an as converted basis assuming conversion of preferred stock to common stock (refer to page S-5 for share amounts assumed in conversion of preferred stock to common stock). This number of shares does not include shares of common stock subject to the underwriters' over-allotment option and also excludes:

24,516,129 shares issuable as of October 31, 2013 for conversion of the remaining outstanding 8% Convertible Unsecured Notes, excluding any shares that could be used to satisfy interest amounts due if not paid in cash;

3,181,464 shares of our common stock issuable upon the exercise of options outstanding at October 31, 2013 under our equity plans;

5,000,000 shares of our common stock issuable upon vesting and exercise of warrants issued as part of co-marketing agreement for the marketing and sales of our power plants;

1,014,989 shares of our common stock available as of October 31, 2013 for future issuance under our equity plans;

425,250 shares of our common stock available as of October 31, 2013 for future issuance under our employee stock purchase plan;

62,280 shares of our common stock available for employee bonuses; and

shares of our common stock and other securities up to an aggregate amount of \$150,000,000 pursuant to a shelf registration statement that we have filed with the SEC, of which \$144,882,644 remained as of October 31, 2013. To the extent that outstanding options are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

UNDERWRITING

Subject to the terms and conditions set forth in an underwriting agreement, each of the underwriters named below has severally agreed to purchase from us the aggregate number of shares of common stock set forth opposite their

respective names below:

Underwriters	Number of Shares
Stifel, Nicolaus & Company, Incorporated	
Cowen and Company, LLC	
FBR Capital Markets & Co.	
 Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to various conditions, including approval of legal matters by counsel. The nature of the underwriters' obligations commits them to purchase and pay for all of the shares of common stock listed above if any are purchased.

The underwriters expect to deliver the shares of common stock to purchasers on or about January , 2014.

Over-Allotment Option

We have granted a 30-day over-allotment option to the underwriters to purchase up to a total of additional shares of our common stock from us at the public offering price, less the underwriting discount payable by us, as set forth on the cover page of this prospectus. If the underwriters exercise this option in whole or in part, then each of the underwriters will be separately committed, subject to the conditions described in the underwriting agreement, to purchase the additional shares of our common stock in proportion to their respective commitments set forth in the table above.

Table of Contents**Commissions and Discounts**

The underwriters propose to offer the shares of common stock directly to the public at the public offering price set forth on the cover page of this prospectus, and at this price less a concession not in excess of \$ _____ per share of common stock to other dealers specified in a master agreement among underwriters who are members of the National Association of Securities Dealers, Inc. After this offering, the offering price, concessions, and other selling terms may be changed by the underwriters. Our common stock is offered subject to receipt and acceptance by the underwriters and to the other conditions, including the right to reject orders in whole or in part.

The following table summarizes the compensation to be paid to the underwriters by us and the proceeds, before expenses, payable to us:

	Per Share	Total Without Over- Allotment	With Over- Allotment
Public offering price	\$	\$	\$
Underwriting discount			
Proceeds, before expenses, to us			

The expenses of the offering, not including the underwriting discounts and commissions, payable by us are estimated to be \$ _____, which includes approximately \$ _____ that we have agreed to reimburse the underwriters for legal fees in connection with this offering.

Indemnification of Underwriters

We will indemnify the underwriters against some civil liabilities, including liabilities under the Securities Act and liabilities arising from breaches of our representations and warranties contained in the underwriting agreement. If we are unable to provide this indemnification, we will contribute to payments the underwriters may be required to make in respect of those liabilities.

No Sales of Similar Securities

We and each of our executive officers and directors, subject to certain exceptions, have agreed with Stifel, Nicolaus & Company, Incorporated not to dispose of or hedge any of our shares of common stock or securities convertible into or exercisable or exchangeable for common stock for 90 days after the date of this prospectus supplement without first obtaining the written consent of Stifel, Nicolaus & Company, Incorporated. The 90-day lock-up period during which we and our executive officers and directors are restricted from engaging in transactions in our common stock or securities convertible into or exercisable or exchangeable for common stock is subject to extension such that, in the event that either (i) during the last 17 days of the lock-up period, we issue an earnings or financial results release or material news or a material event relating to us occurs, or (ii) prior to the expiration of the lock-up period, we announce that we will release earnings or financial results during the 16-day period beginning on the last day of the lock-up period, then in either case the expiration of the lock-up period will be extended until the expiration of the 18-day period beginning on the issuance of the earnings or financial results release or the occurrence of the material news or material event, as applicable, unless Stifel, Nicolaus & Company, Incorporated waives, in writing, such an extension.

Affiliations

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and their affiliates may from time to time in the future engage with us or perform services for us in the ordinary course of their business for which they will receive customary fees and expenses. In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of us or the selling stockholders. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of these securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in these securities and instruments.

Short Sales, Stabilizing Transactions, and Penalty Bids

In order to facilitate this offering, persons participating in this offering may engage in transactions that stabilize, maintain, or otherwise affect the price of our common stock during and after this offering. Specifically, the underwriters may engage in the following activities in accordance with the rules of the Securities and Exchange Commission.

S-20

Table of Contents

Short sales. Short sales involve the sales by the underwriters of a greater number of shares than they are required to purchase in the offering. Covered short sales are short sales made in an amount not greater than the underwriters over-allotment option to purchase additional shares from us in this offering. The underwriters may close out any covered short position by either exercising their over-allotment option to purchase shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option. Naked short sales are any short sales in excess of such over-allotment option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

Stabilizing transactions. The underwriters may make bids for or purchases of the shares for the purpose of pegging, fixing, or maintaining the price of the shares, so long as stabilizing bids do not exceed a specified maximum.

Penalty bids. If the underwriters purchase shares in the open market in a stabilizing transaction or syndicate covering transaction, they may reclaim a selling concession from the underwriters and selling group members who sold those shares as part of this offering. Stabilization and syndicate covering transactions may cause the price of the shares to be higher than it would be in the absence of these transactions. The imposition of a penalty bid might also have an effect on the price of the shares if it discourages presales of the shares. The transactions above may occur on the NASDAQ Global Select Market or otherwise. Neither we nor the underwriters make any representation or prediction as to the effect that the transactions described above may have on the price of the shares. If these transactions are commenced, they may be discontinued without notice at any time.

United Kingdom

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (e) of the Order (all such persons together being referred to as relevant persons). The shares of common stock are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such common stock will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 or FSMA) received by it in connection with the issue or sale of the shares in circumstances in which Section 21(1) of the FSMA does not apply to us, and

(b) it has complied with, and will comply with all applicable provisions of FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

European Economic Area

To the extent that the offer of the common stock is made in any Member State of the European Economic Area that has implemented the Prospectus Directive before the date of publication of a prospectus in relation to the common

stock which has been approved by the competent authority in the Member State in accordance with the Prospectus Directive (or, where appropriate, published in accordance with the Prospectus Directive and notified to the competent authority in the Member State in accordance with the Prospectus Directive), the offer (including any offer pursuant to this document) is only addressed to qualified investors in that Member State within the meaning of the Prospectus Directive or has been or will be made otherwise in circumstances that do not require us to publish a prospectus pursuant to the Prospectus Directive.

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date) it has not made and will not make an offer of shares to the public in that Relevant Member State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of shares to the public in that Relevant Member State at any time:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities,

Table of Contents

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than A43,000,000 and (3) an annual net turnover of more than A50,000,000, as shown in its last annual or consolidated accounts, or

(c) in any other circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive. For the purposes of this provision, the S-14 expression an offer of shares to the public in relation to any shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the shares to be offered so as to enable an investor to decide to purchase or subscribe the shares, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

The EEA selling restriction is in addition to any other selling restrictions set out below. In relation to each Relevant Member State, each purchaser of shares of common stock (other than the underwriters) will be deemed to have represented, acknowledged and agreed that it will not make an offer of shares of common stock to the public in any Relevant Member State, except that it may, with effect from and including the date on which the Prospectus Directive is implemented in the Relevant Member State, make an offer of shares of common stock to the public in that Relevant Member State at any time in any circumstances which do not require the publication by us of a prospectus pursuant to Article 3 of the Prospectus Directive, provided that such purchaser agrees that it has not and will not make an offer of any shares of common stock in reliance or purported reliance on Article 3(2)(b) of the Prospectus Directive. For the purposes of this provision, the expression an offer of shares to the public in relation to any shares of common stock in any Relevant Member State has the same meaning as in the preceding paragraph.

Transfer Agent

The transfer agent for our common shares to be issued in this offering is American Stock Transfer & Trust Company. Our common shares are traded on The NASDAQ Global Market under the symbol FCEL.

LEGAL MATTERS

The validity of the securities offered hereby will be passed upon for us by Robinson & Cole LLP, Stamford, Connecticut. Certain matters will be passed upon for the underwriters by Proskauer Rose LLP, New York, New York.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934 and, therefore, we file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (SEC). Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. The SEC's website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC's public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549 and the web site of the SEC at www.sec.gov. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room. Our common stock is quoted on The Nasdaq Global Market, and you may also inspect and copy our SEC filings at the offices of the National Association of Securities Dealers, Inc. located at 1735 K Street, N.W., Washington, D.C. 20006. The SEC maintains an Internet web site that contains reports, proxy and information statements and other information regarding issuers, including us, that file electronically with the SEC.

You should rely only on the information provided in, and incorporated by reference in, this prospectus supplement and the prospectus and the registration statement. We have not authorized anyone else to provide you with different information. Our securities are not being offered in any state where the offer is not permitted. You should assume that the information in this prospectus supplement is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

S-22

Table of Contents

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus supplement. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference into this registration statement and prospectus the documents listed below, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934:

Our Annual Report on Form 10-K for the fiscal year ended October 31, 2013, filed with the SEC on January 6, 2014;

Our Current Reports on Form 8-K, filed with the SEC on December 18, 2013 and January 16, 2014; and

The description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on June 6, 2000, including any amendments or reports filed for the purposes of updating this description.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to FuelCell Energy, Inc., Attention: Corporate Secretary, 3 Great Pasture Road, Danbury, Connecticut 06813, telephone: (203) 825-6000.

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to our securities offered hereby. This prospectus supplement, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. We have omitted certain parts of the registration statement as permitted by the rules and regulations of the SEC. For further information about us and our securities offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus supplement regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement.

Table of Contents

PROSPECTUS

\$150,000,000

Debt Securities

Preferred Stock

Common Stock

Warrants

Units

We may from time to time offer and sell any combination of debt securities, preferred stock, warrants and/or common stock described in this prospectus, either individually or in units, in one or more offerings. The aggregate initial offering price of all securities sold under this prospectus will not exceed \$150,000,000.

The securities may be offered to or through underwriters, through agents or dealers, through market sales directly to one or more purchasers or through a combination of such methods. See Plan of Distribution.

This prospectus provides a general description of the securities we may offer. In certain cases, we specify in an accompanying prospectus supplement the specific terms of the securities offered and the offering price and terms of an offering of the securities, including, but not limited to, the names of any underwriters, agents or dealers. The prospectus supplement may also add, update or change information contained in this prospectus. You should read this prospectus and the applicable prospectus supplement, if any, carefully before you invest in any securities.

We will use the net proceeds received from the sale of the securities by the Company for general corporate purposes.

Our common stock is quoted on the Nasdaq Global Market under the symbol FCEL. No public market currently exists for the other securities offered hereby. The applicable prospectus supplement will contain information, where applicable, as to any other listing on any securities exchange of the securities covered by the prospectus supplement.

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 securities involves risks that are described in the Risk Factors section beginning on page 3 of this prospectus.

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 July 18, 2013

Table of Contents

TABLE OF CONTENTS

	Page
<u>FORWARD-LOOKING STATEMENTS</u>	1
<u>ABOUT THIS PROSPECTUS</u>	1
<u>FUELCELL ENERGY, INC.</u>	1
<u>RISK FACTORS</u>	3
<u>RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED DIVIDENDS</u>	16
<u>USE OF PROCEEDS</u>	16
<u>DESCRIPTION OF DEBT SECURITIES</u>	16
<u>DESCRIPTION OF CAPITAL STOCK</u>	23
<u>DESCRIPTION OF WARRANTS</u>	33
<u>DESCRIPTION OF UNITS</u>	35
<u>PLAN OF DISTRIBUTION</u>	36
<u>DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES</u>	38
<u>LEGAL MATTERS</u>	38
<u>EXPERTS</u>	38
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	38
<u>INCORPORATION BY REFERENCE</u>	38

Table of Contents**FORWARD-LOOKING STATEMENTS**

When used in this prospectus, the words *expects*, *anticipates*, *estimates*, *should*, *will*, *could*, *would*, *may*, and similar expressions are used to identify forward-looking statements. Such statements relate to the development and commercialization of FuelCell Energy, Inc.'s and its subsidiaries (FuelCell Energy, Company, we, us and our) fuel cell technology and products, future funding under government research and development contracts, the expected cost competitiveness of our technology, and our ability to achieve our sales plans and cost reduction targets. These and other forward-looking statements contained in this prospectus are subject to risks and uncertainties, known and unknown, that could cause actual results to differ materially from those forward-looking statements, including, without limitation, general risks associated with product development and manufacturing, changes in the utility regulatory environment, potential volatility of energy prices, government appropriations, the ability of the government to terminate its development contracts at any time, rapid technological change, and competition and changes in accounting policies or practices adopted voluntarily or as required by accounting principles generally accepted in the United States, as well as other risks contained under Item 7 *Management's Discussion and Analysis of Financial Condition and Results of Operations - Factors That May Affect Future Results* of our Annual Report on Form 10-K for the year ended October 31, 2012. We cannot assure you that we will be able to meet any of our development or commercialization schedules, that the government will appropriate the funds anticipated by us under our government contracts, that the government will not exercise its right to terminate any or all of our government contracts, that any of our products or technology, once developed, will be commercially successful, or that we will be able to achieve any other result anticipated in any other forward-looking statement contained herein. The forward-looking statements contained herein speak only as of the date of this prospectus. Except for ongoing obligations to disclose material information under the federal securities laws, we expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any such statement to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission (SEC) utilizing a shelf registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of \$150,000,000. This prospectus provides you with a general description of the securities that we may offer. Each time we sell securities under this shelf registration, we will provide a prospectus supplement, if required, supplement that will contain specific information about the terms of the offering. The prospectus supplement may also add, update or change information contained 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 carefully read both this prospectus and any prospectus supplement, including documents incorporated by reference herein, together with the additional information described in the section entitled *Where You Can Find More Information*.

We have not authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying supplement to this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or any accompanying prospectus supplement. This prospectus and the accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and any accompanying prospectus supplement is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities sold on a later date.

FUELCELL ENERGY, INC.***Overview***

We are a leading integrated fuel cell company with a growing global presence. We design, manufacture, install, operate and service ultra-clean, efficient and reliable stationary fuel cell power plants for distributed baseload power generation. Our power plants offer scalable on-site power and utility grid support, helping customers solve their energy, environmental and business challenges. Initially a research company, FuelCell Energy was founded in Connecticut in 1969 and became a publicly traded company in 1992. We reincorporated in Delaware in 1999 and began selling commercialized fuel cell power plants in 2003.

Our Company vision is to provide ultra-clean, highly efficient, reliable distributed generation baseload power at a cost per kilowatt hour that is less than the cost of grid-delivered electricity. Our power plants provide electricity that is priced competitively to grid-delivered electricity in certain high cost regions and our strategy is to continue to reduce costs, which is expected to lead to wider adoption of our power plants.

Table of Contents

With fully commercialized ultra-clean fuel cell power plants and decades of experience in the industry, we are well positioned to grow our installed base of power plants. Our plants are operating in more than 50 locations worldwide and have generated more than 1.6 billion kilowatt hours (kWh) of electricity, which is equivalent to powering more than 145,000 average size U.S. homes for one year. Our installed base and steadily growing backlog exceeds 300 megawatts (MW).

Our customer base includes utility companies, municipalities, universities, government entities and businesses in a variety of commercial and industrial enterprises. Our leading geographic markets are South Korea and the United States and we are pursuing expanding opportunities in Asia and Europe.

Our Direct FuelCell® (DFC®) power plants use a variety of available fuels to produce electricity electrochemically without combustion in a process that is highly efficient, quiet and produces virtually no pollutants. DFC power plants generate more power and fewer emissions for a given unit of fuel than combustion-based power generation of a similar size, making them economical and environmentally responsible power generation solutions. In addition to electricity, our DFC power plants produce high quality heat that can be used for heating, cooling and other purposes; when used in Combined Heat and Power (CHP) configurations, system efficiencies can reach 90 percent. Unlike solar and wind power, our DFC power plants operate continuously regardless of geography, weather or time of day.

We service two primary markets: ultra-clean power (fuel cells operating on clean natural gas) and renewable power (fuel cells operating on renewable biogas). Our strategy is to expand in the 11 distinct vertical submarkets we have identified and further penetrate our key geographic markets while continuing to reduce product costs and expand our services business created by our increasing installed base of power plants. The sale of higher volumes of our products will further reduce costs and increase margins.

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.

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, kilowatt (kW) means 1,000 watts; megawatt (MW) means 1,000,000 watts; and kilowatt hour (kWh) is equal to 1 kW of power supplied to or taken from an electric circuit steadily for one hour. All dollar amounts are in U.S. dollars unless otherwise noted.

Table of Contents

RISK FACTORS

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

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

We have been transitioning from a contract research and development company to a commercial products developer, manufacturer and services provider. As such, we have not been profitable since our fiscal year ended October 31, 1997. We expect to continue to incur net losses and generate negative cash flows until we can produce sufficient revenues to cover our costs. We may never become profitable. Even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future. For the reasons discussed in more detail below, there are substantial uncertainties associated with our achieving and sustaining profitability. We have, from time to time, sought financing in the public markets in order to fund operations. Our future ability to obtain such financing, if required, could be impaired by a variety of factors, including, but not limited to, the price of our common stock and general market conditions.

Our cost reduction strategy may not succeed or may be significantly delayed, which may result in our inability to deliver improved margins.

Our cost reduction strategy is based on the assumption that continued increases in production will result in economies of scale. In addition, our cost reduction strategy relies on advancements in our manufacturing process, global competitive sourcing, engineering design and technology improvements (including stack life and projected power output). Failure to achieve our cost reduction targets could have a material adverse effect on our results of operations and financial condition.

Our products compete with products using other energy sources, and if the prices of the alternative sources are lower than energy sources used by our products, sales of our products will be adversely affected. Volatility of electricity and fuel prices may impact sales of our products and services in the markets in which we compete.

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

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

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

Table of Contents

Financial markets worldwide have experienced increased volatility and instability which may have a material adverse impact on our Company, our customers and our suppliers.

Financial market volatility and instability affects both debt and equity markets. This may impact the amount of financing available to all companies, including companies with substantially greater resources, better credit ratings and more successful operating histories than ours. It is impossible to predict future financial market volatility and instability and the impact on our Company and it may have a materially adverse effect on us for a number of reasons, such as:

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

Projects using our products are, in part, financed by equity investors interested in tax benefits as well as by the commercial and governmental debt markets. The significant volatility in the U.S. and international stock markets since 2008 has caused significant uncertainty and may result in an increase in the return required by investors in relation to the risk of such projects.

If we, or our customers and suppliers, cannot obtain financing under favorable terms, our business may be negatively impacted.

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

The Company applies the percentage of completion revenue recognition method to certain product sales contracts which are subject to estimates. On a quarterly basis, the Company performs a review process to help ensure that total estimated contract costs include estimates of costs to complete that are based on the most recent available information. The percentage of completion for the customer contracts based on this cost analysis is then applied to the total customer contract values to determine the total revenue to be recognized to date.

We have contracted under long-term service agreements with certain customers to provide service on our products over terms ranging from one to 20 years. Under the provisions of these contracts, we provide services to maintain, monitor, and repair customer power plants to meet minimum operating levels. Pricing for service contracts is based upon estimates of future costs including future stack replacements. While we have conducted tests to determine the overall life of our products, we have not run our products over their projected useful life prior to large-scale commercialization. As a result, we cannot be sure that our products will last to their expected useful life, which could result in warranty claims, performance penalties, maintenance and stack replacement costs in excess of our estimates and losses on service contracts.

The Company has one customer who purchases power under a Power purchase agreement (PPA), whereby the customer agrees to purchase power from our fuel cell power plants at negotiated rates. Electricity rates are generally a function of the customer s current and future electricity pricing available from the grid. Should electricity rates decrease or operating costs increase from our original estimates, our results of operations could be negatively impacted. We are not required to produce minimum amounts of power under this PPA agreement. We provide termination rights by giving written notice to the customer, subject to certain exit costs.

Table of Contents

We extend product warranties, which could affect our operating results.

We warranty our products for a specific period of time against manufacturing or performance defects. We accrue for warranty costs based on historical warranty claim experience, however actual future warranty expenses may be greater than we've assumed in our estimates. As a result, operating results could be negatively impacted should there be product manufacturing or performance defects in excess of our estimates.

Our products are complex and could contain defects and may not operate at expected performance levels which could impact sales and market adoption of our products or result in claims against us.

We develop complex and evolving products. Our initial installations were demonstration power plants intended to test the technology in real-world applications. We learned extensively from these demonstration installations, enhancing the technology and improving the operation of the power plants. Our first commercial Direct FuelCell power plant installation in 2003 had a rated power output of 250 kW and a 3 year stack life. Most of these 250 kW installations were terminated at contract conclusion or earlier as the costs were too high to justify continuation and the customer's power needs did not support a megawatt-class power plant. Certain of these early product designs did not meet our expectations resulting in mixed performance history, impacting the adoption rate of our products. Costs are lower for our newer megawatt-class plants compared to sub-megawatt plants due to scale. With the growing expertise gained from an expanding installed base, we continue to advance the capabilities of the fuel cell stacks and are now producing stacks with a rated power output of 350 kW and an expected five year life.

We have limited field operating experience on our products, and despite experience gained from our growing installed base and testing performed by us, our customers and our suppliers, issues may be found in existing or new products. This could result in a delay in recognition or loss of revenues, loss of market share or failure to achieve broad market acceptance. The occurrence of defects could also cause us to incur significant warranty, support and repair costs, could divert the attention of our engineering personnel from our product development efforts, and could harm our relationships with our customers. The occurrence of these problems could result in the delay or loss of market acceptance of our products and would likely harm our business. Defects or performance problems with our products could result in financial or other damages to our customers. From time to time, we have been involved in disputes regarding product warranty issues. Although we seek to limit our liability, a product liability claim brought against us, even if unsuccessful, would likely be time consuming and could be costly to defend. Our customers could also seek and obtain damages from us for their losses. We have reserved for potential damages related to performance problems, however actual results may be different than the assumptions used in our reserve calculations.

We currently face and will continue to face significant competition.

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

Several companies are involved in fuel cell development, although we believe we are the only domestic company engaged in significant manufacturing and commercialization of carbonate fuel cells. Emerging fuel cell technologies (and companies developing them) include PEM fuel cells (Ballard Power Systems, Inc.),

Table of Contents

phosphoric acid fuel cells (ClearEdge Power) and solid oxide fuel cells (LG, and Bloom Energy). Each of these competitors has the potential to capture market share in our target markets. There are also other potential fuel cell competitors internationally that could capture market share.

Other than fuel cell developers, we must also compete with companies that manufacture more mature combustion-based equipment, including various engines and turbines, and have well-established manufacturing, distribution, and operating and cost features. Electrical efficiency of these products can be competitive with our DFC Power Plants in certain applications. Significant competition may also come from gas turbine companies.

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

POSCO currently owns approximately 16 percent of our outstanding common stock, which could make it difficult for a third party to acquire our common stock. POSCO is also a licensee of our technology and purchaser of our products. Therefore, it may be in their interests to possess substantial influence over matters concerning our overall strategy and technological and commercial development.

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

Our first commercial power plant installation was in 2003 so we have limited experience manufacturing our products on a commercial basis. With full utilization under its current configuration, our overall manufacturing process has a production capacity of 90 MW per year depending on product mix and other factors. We expect that we will further increase our manufacturing capacity based on market demand. We cannot be sure that we will be able to achieve any planned increases in production capacity. Also, as we scale up our production capacity, we cannot be sure that unplanned failures or other technical problems relating to the manufacturing process will not occur.

Even if we are successful in achieving our planned increases in production capacity, we cannot be sure that we will do so in time to satisfy the requirements of our customers. Our failure to develop advanced manufacturing capabilities and processes, or meet our cost goals, could have a material adverse effect on our business prospects, results of operations and financial condition.

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

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

Our plans are dependent on market acceptance of our products.

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

the cost competitiveness of our fuel cell products including availability and output expectations and total cost of ownership;

Table of Contents

the future costs of clean natural gas and other fuels used by our fuel cell products;

customer reluctance to try a new product;

the market for distributed generation;

local permitting and environmental requirements; and

the emergence of newer, more competitive technologies and products.

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

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

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

We contract with a concentrated number of customers for the sale of products and for research and development contracts. This includes POSCO, which is a related party and owns approximately 15 percent of the outstanding common shares of the Company.

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

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

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

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

Table of Contents

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

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

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

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

Many of our U.S. patents relating to our fuel cell technology are the result of government-funded research and development programs. We own all patents resulting from research funded by our DOE contracts awarded 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.

Nine U.S. patents that we own have resulted from government-funded research and are subject to the risk of exercise of march-in rights by the government. March-in rights refer to the right of the U.S. government or a government agency to exercise its non-exclusive, royalty-free, irrevocable worldwide license to any technology developed under contracts funded by the government if the contractor fails to continue to develop the technology. These march-in rights permit the U.S. government to take title to these patents and license the patented technology to third parties if the contractor fails to utilize the patents. In addition, one of our DOE-funded research and development agreements also required 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.

We now qualify as a large business, which could adversely affect our rights to own future patents under DOE-funded contracts.

This year, we qualify as a large business under DOE contracts. This allows us to own the patents that we develop under new DOE contracts if we obtain a waiver from DOE. A large business under applicable government regulations generally consists of more than 500 employees averaged over a one year period. We will no longer own future patents we develop under new contracts, grants or cooperative agreements funded by the DOE, unless we obtain a patent waiver from the DOE. Should we not obtain a patent waiver and outright ownership, we would nevertheless retain exclusive rights to any such patents, so long as we continue to commercialize the technology covered by the patents.

Table of Contents

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

We cannot assure you that we will enter into partnerships that are consistent with, or sufficient to support, our commercialization plans, and our growth strategy or that these relationships will be on terms favorable to us. Even if we enter into these types of relationships, we cannot assure you that the partners with which we form relationships will focus adequate resources on selling our products or will be successful in selling them. Some of these arrangements have or will require that we grant exclusive rights to companies in defined territories. These exclusive arrangements could result in our being unable to enter into other arrangements at a time when the partner with which we form a relationship is not successful in selling our products or has reduced its commitment to marketing our products. In addition, future 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 partnerships or relationships, the failure of these partners to assist us with the deployment of our products may adversely affect our results of operations and financial condition.

We depend on third-party suppliers for the development and supply of key raw materials and components for our products.

We use various raw materials and components to construct a fuel cell module, including nickel and stainless steel which are critical to our manufacturing process. We also rely on third-party suppliers for the balance-of-plant components in our products. Suppliers must undergo a qualification process, which takes four to twelve months. We continually evaluate new suppliers and we are currently qualifying several new suppliers. There are a limited number of suppliers for some of the key components of products. A supplier's failure to develop and supply components in a timely manner, supply components that meet our quality, quantity or cost requirements, technical specifications, or our inability to obtain alternative sources of these components on a timely basis or on terms acceptable to us could harm our ability to manufacture our Direct FuelCell products. In addition, to the extent the processes that our suppliers use to manufacture components are proprietary; we may be unable to obtain comparable components from alternative suppliers.

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

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

Failure to protect our existing intellectual property rights may result in the loss of our exclusivity or the right to use our technologies. If we do not adequately ensure our freedom to use certain technology, we may have to pay others for rights to use their intellectual property, pay damages for infringement or misappropriation, or be enjoined from using such intellectual property. We rely on patent, trade secret, trademark and copyright law to protect our intellectual property. In addition, we have licensed much of our intellectual property to carefully selected third parties, and we depend on those third parties to also protect our intellectual property rights. As of April 30, 2013, we had 116 current U.S. patents and 228 international patents covering our fuel cell technology (including patents licensed to FCES). The U.S. patents have an average remaining life of 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 able to be patented, particularly as it relates to our manufacturing processes and engineering design. In addition, some of our intellectual property includes technologies and processes that may be similar to the patented technologies and processes of third parties. If we are found to be infringing third-party patents, we do not know whether we will be able to obtain licenses to use such patents on acceptable terms, if at all. Our patent position is subject to complex factual and legal issues that may give rise to uncertainty as to the validity, scope, and enforceability of a particular patent.

Table of Contents

We cannot assure you that any of the U.S. or international patents owned by us or other patents that third parties license to us will not be invalidated, circumvented, challenged, rendered unenforceable or licensed to others, or any of our pending or future patent applications will be issued with the breadth of claim coverage sought by us, if issued at all. In addition, effective patent, trademark, copyright and trade secret protection may be unavailable, limited or not applied for in certain foreign countries.

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

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

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

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

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

Our management may be unable to manage rapid growth effectively.

We may rapidly expand our manufacturing capabilities, accelerate the commercialization of our products and enter a period of rapid growth, which will place a significant strain on our senior management team and our

Table of Contents

financial and other resources. Any expansion may expose us to increased competition, greater overhead, marketing and support costs and other risks associated with the commercialization of a new product. Our ability to manage rapid growth effectively will require us to continue to improve our operations, to improve our financial and management information systems and to train, motivate and manage our employees. Difficulties in effectively managing issues presented by such a rapid expansion could harm our business prospects, results of operations and financial condition.

We may be affected by environmental and other governmental regulation.

We are subject to various federal, state and local laws and regulations relating to, among other things, land use, safe working conditions, handling and disposal of hazardous and potentially hazardous substances and emissions of pollutants into the atmosphere. In addition, it is possible that industry-specific laws and regulations will be adopted covering matters such as transmission scheduling, distribution, and the characteristics and quality of our products, including installation and servicing. These regulations could limit the growth in the use of carbonate fuel cell products, decrease the acceptance of fuel cells as a commercial product and increase our costs and, therefore, the price of our products. Accordingly, compliance with existing or future laws and regulations could have a material adverse effect on our business prospects, results of operations and financial condition.

Utility companies may resist the adoption of distributed generation and could impose customer fees or interconnection requirements on our customers that could make our products less desirable.

Investor-owned utilities may resist adoption of distributed generation fuel cell plants as the power plants are disruptive to the utility business model that primarily utilizes large central generation power plants and associated transmission and distribution. On-site distributed generation that is on the customer-side of the electric meter competes with the utility. Distributed generation on the utility-side of the meter generally has power output that is significantly less than central generation power plants and may be perceived by the utility as too small to materially impact their business, limiting their interest. Additionally, perceived technology risk may limit utility interest in stationary fuel cell power plants.

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

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

Our business exposes us to the risk of harmful substances escaping into the environment, resulting in personal injury or loss of life, damage to or destruction of property, and natural resource damage. Depending on the nature of the claim, our current insurance policies may not adequately reimburse us for costs incurred in settling environmental damage claims, and in some instances, we may not be reimbursed at all. Our business is subject to numerous federal, state, and local laws and regulations that govern environmental protection and human

Table of Contents

health and safety. We believe that our businesses are operating in compliance in all material respects with applicable environmental laws, however these laws and regulations have changed frequently in the past and it is reasonable to expect additional and more stringent changes in the future.

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

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

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

We are subject to risks inherent in international operations.

Since we market our products both inside and outside the U.S., our success depends in part, on our ability to secure international customers and our ability to manufacture products that meet foreign regulatory and commercial requirements in target markets. Sales to customers located outside the U.S. accounts for a significant portion of our consolidated revenue. Sales to customers in South Korea represent the majority of our international sales. We have limited experience developing and manufacturing our products to comply with the commercial and legal requirements of international markets. In addition, we are subject to tariff regulations and requirements for export licenses, particularly with respect to the export of some of our technologies. We face numerous challenges in our international expansion, including unexpected changes in regulatory requirements, potential conflicts or disputes that countries may have to deal with, fluctuations in currency exchange rates, longer accounts receivable requirements and collections, difficulties in managing international operations, potentially adverse tax consequences, restrictions on repatriation of earnings and the burdens of complying with a wide variety of international laws. Any of these factors could adversely affect our results of operations and financial condition.

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 commercialization milestones;

Table of Contents

variations in our quarterly operating results from the expectations of securities analysts or investors;

downward revisions in securities analysts' estimates or changes in general market conditions;

announcements of technological innovations or new products or services by us or our competitors;

announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;

additions or departures of key personnel;

investor perception of our industry or our prospects;

insider selling or buying;

demand for our common stock; and

general technological or economic trends.

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

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

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

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

We have entered into relationships with strategic partners for design, product development, sale and service 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, 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.

Table of Contents

The rights of the Series 1 preferred shares and Series B preferred stock could negatively impact our cash flows.

The terms of the Series 1 preferred shares issued by FCE FuelCell Energy, Ltd. (FCE Ltd.), our wholly-owned, indirect subsidiary, provide rights to the holder, Enbridge Inc. (Enbridge), which could negatively impact us.

On March 31, 2011, the Company entered into an agreement with Enbridge to modify the provisions of the Class A Cumulative Redeemable Exchangeable Preferred Shares (the Series 1 Preferred Shares) of FCE Ltd. Enbridge is the sole holder of the Series 1 Preferred Shares. Consistent with the previous Series 1 preferred share agreement FuelCell Energy, Inc. continues to guarantee the return of principal and dividend obligations of FCE Ltd. to the Series 1 preferred shareholders under the modified agreement.

The provisions of the Series 1 Preferred Shares require that FCE Ltd. make annual dividend payments totaling Cdn. \$1,250,000, including (i) annual dividend payments of Cdn. \$500,000 and (ii) annual return of capital payments of Cdn. \$750,000. These payments will end on December 31, 2020. Additional dividends accrue on cumulative unpaid dividends at a 1.25 percent quarterly rate, compounded quarterly, until payment thereof. On December 31, 2020 the amount of all accrued and unpaid dividends on the Series 1 Preferred Shares of Cdn. \$21.1 million and the balance of the principal redemption price of Cdn. \$4.4 million shall be paid to the holders of the Series 1 Preferred Shares. FCE Ltd. has the option of making dividend payments in the form of common stock or cash under the Series 1 Preferred Shares provisions.

We are also required to issue common stock to the holder of the Series 1 preferred shares if and when the holder exercises its conversion rights. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders. For example, assuming the holder of the Series 1 preferred shares exercises its conversion rights after July 31, 2020 and assuming our common stock price is \$1.05 (our common stock closing price on April 30, 2013) and an exchange rate of Cdn. \$1.00 to U.S.\$1.00 at the time of conversion, we would be required to issue approximately 4,455,932 shares of our common stock.

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

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

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

Table of Contents

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

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

As we gain experience in future periods, management will continue to reevaluate its estimates for contract margins, service agreements, loss reserves, warranty, performance guarantees, liquidated damages and inventory reserves. Changes in those estimates and judgments could significantly affect our results of operations and financial condition. We may also adopt changes required by the Financial Accounting Standards Board and the Securities and Exchange Commission.

Risks Related to this Registration

Management will have broad discretion as to the use of the proceeds of this registration.

We have not designated the amount of net proceeds we will receive from this registration for any particular purpose. Accordingly, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this registration. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds.

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.

Table of Contents**RATIO OF EARNINGS TO COMBINED FIXED CHARGES AND PREFERRED DIVIDENDS**

The ratio of our earnings to fixed charges are set forth below for each of the periods indicated.

	Six Months		Fiscal Year Ended October 31,			
	Ended April 30, 2013(1)	2012(2)	2011 (2)	2010 (2)	2009 (2)	2008 (2)
Ratio of earnings to fixed charges and preference dividends	N/A	N/A	N/A	N/A	N/A	N/A

(1) For the six months ended April 30, 2013, our earnings were insufficient to cover fixed charges. The coverage deficiency was \$20.6 million.

(2) For the fiscal years ended October 31, 2012, 2011, 2010, 2009 and 2008, our earnings were insufficient to cover fixed charges. The coverage deficiencies were \$34.2 million, \$48.3 million, \$55.6 million, \$68.6 million and \$92.9 million, respectively.

For purposes of calculating the ratios of earnings to fixed charges, (i) fixed charges consist of interest on debt, amortization of discount on debt, capitalized interest, and preferred dividends and (ii) earnings consist of pre-tax income from operations and fixed charges (excluding capitalized interest) and include the amortization of capitalized interest.

USE OF PROCEEDS

Except as may be provided in an applicable prospectus supplement, we will use the net proceeds from the sale of the debt securities, preferred stock, warrants and/or common stock for market and product development, project financing and general corporate purposes. General corporate purposes may include capital expenditures, repayment of debt, payment of dividends and any other purposes that we may specify in any prospectus supplement. We may invest the net proceeds temporarily until we use them for their stated purpose.

DESCRIPTION OF DEBT SECURITIES

We may from time to time offer and sell debt securities consisting of debentures, notes and/or other unsecured evidences of indebtedness (the Debt Securities). The following description of Debt Securities will apply to the Debt Securities offered by this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of Debt Securities may specify different or additional terms.

As of the date hereof, we have outstanding \$38,000,000 of 8% Senior Unsecured Convertible Notes, due June 15, 2018.

The Debt Securities will be either our unsecured senior debt securities (the Senior Debt Securities) or our unsecured subordinated debt securities (the Subordinated Debt Securities). The Senior Debt Securities may be issued under an Indenture (the Senior Indenture) between us and a trustee that will be identified in a prospectus supplement (the Senior Trustee). The Senior Debt Securities will be our direct, unsecured obligations and will rank equally with all of our outstanding unsecured senior indebtedness. The Subordinated Debt Securities may be issued under a second indenture (the Subordinated Indenture) between us and a trustee that will be identified in a prospectus supplement (the Subordinated Trustee), which may be the same as the Senior Trustee. The Subordinated Debt Securities will be our direct, unsecured obligations and, unless otherwise specified in the prospectus supplement relating to a particular series of Subordinated Debt Securities offered by such prospectus supplement, will be subject to the subordination provisions set forth under the heading Subordination of the Subordinated Debt Securities below. The Senior Indenture and the Subordinated Indenture are together called the Indentures and the Senior Trustee and the Subordinated Trustee are together called the Trustee.

The following summary of certain provisions of the Indentures is not complete. You should refer to the form of each Indenture, copies of which will be filed as exhibits to the registration statement of which this prospectus is a part.

The following section describes certain general terms and provisions of the Debt Securities. The Debt Securities may be issued from time to time in one or more series. The particular terms of each series of Debt Securities offered by any prospectus supplement will be described in that prospectus supplement.

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

General. An Indenture will not limit the aggregate principal amount of Debt Securities that we may issue. Each Indenture may provide that Debt Securities of any series may be issued under it up to the aggregate principal amount authorized from time to time by

Table of Contents

us and may be denominated in any currency or currency unit that we designate. We will determine the terms and conditions of each series of Debt Securities, including the maturity, principal and interest, but those terms must be consistent with the Indenture. Unless set forth in the applicable prospectus supplement, neither the Indentures nor the Debt Securities will limit or otherwise restrict the amount of other indebtedness that we may incur or the other securities that we may issue.

The prospectus supplement relating to each series of Debt Securities being offered will specify the particular terms of those Debt Securities. The terms may include:

the title of the Debt Securities and whether they are Senior Debt Securities or Subordinated Debt Securities;

any limit on the aggregate principal amount of the Debt Securities;

the priority of payment of the Debt Securities, including any subordination provisions;

the price or prices (which may be expressed as a percentage of the aggregate principal amount thereof) at which the Debt Securities will be issued;

the date or dates on which the principal and premium, if any, of the Debt Securities are payable;

the interest rate or rates (which may be fixed or variable) of the Debt Securities, if any;

the interest payment date or dates, if any, or the method or methods by which such dates may be determined, if any, the date or dates on which payment of interest, if any, will commence, the date or dates from which interest will accrue and the regular record dates for such interest payment dates;

the extent to which any of the Debt Securities will be issuable in temporary or permanent global form, or the manner in which any interest payable on a temporary or permanent Global Security (as defined herein) will be paid;

each office or agency where, subject to the terms of the applicable Indenture, the Debt Securities may be presented for registration of transfer or exchange;

the place or places where, subject to the terms of the applicable Indenture, the principal (and premium, if any) and interest, if any, on the Debt Securities will be payable;

the terms and conditions on which we may redeem any Debt Securities, if at all;

any obligation to redeem or purchase any Debt Securities and the terms and conditions on which we must do so;

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

the denomination or denominations in which the Debt Securities will be issuable if other than \$1,000 and integral multiples thereof;

the currency, currencies or units based on or related to currencies for which the Debt Securities may be purchased and the currency, currencies or currency units in which the principal of, premium, if any, and any interest on such Debt Securities may be payable;

whether the Debt Securities will be convertible into shares of our common stock or preferred stock, or other securities or property, and, if so, the terms of such conversion;

any index used to determine the amount of payments of principal of, premium, if any, and interest on the Debt Securities;

the payment of any additional amounts with respect to the Debt Securities;

whether any of the Debt Securities will be issued as Original Issue Discount Securities (as defined below) and the terms and provisions relating to these securities;

information with respect to book-entry procedures relating to Global Securities, if any;

if applicable, that the Debt Securities are defeasible;

any additional covenants or Events of Default not set forth in the applicable Indenture or changes in the covenants or Events of Default set forth in the applicable Indenture; and

any other terms of the Debt Securities not inconsistent with the provisions of the applicable Indenture.

Table of Contents

Debt Securities may be issued as original issue discount Debt Securities (bearing no interest or interest at a rate that at the time of issuance is below market rates) (Original Issue Discount Securities), to be sold at a substantial discount below their stated principal amount. There may not be any periodic payments of interest on Original Issue Discount Securities. In the event of an acceleration of the maturity of any Original Issue Discount Security, the amount payable to the holder of such Original Issue Discount Security upon such acceleration will be set forth in the prospectus supplement and determined in accordance with the terms of such security and the applicable Indenture, but will be an amount less than the amount payable at the maturity of the principal of such Original Issue Discount Security. The federal income tax considerations with respect to Original Issue Discount Securities will be explained in the prospectus supplement we prepare for the Original Issue Discount Securities.

Conversion and Exchange Rights. The prospectus supplement will describe, if applicable, the terms on which you may convert Debt Securities into or exchange them for our common stock, our preferred stock or other securities or property. The conversion or exchange may be mandatory or may be at your option. We will describe how the number of shares of our common stock, our preferred stock or other securities or property to be received upon conversion or exchange would be calculated.

Form, Exchange and Transfer. We will issue Debt Securities only in fully registered form, without coupons, and, unless otherwise specified in the prospectus supplement, only in denominations of \$1,000 and integral multiples thereof.

The holder of a Debt Security may elect, subject to the terms of the applicable Indenture and the limitations applicable to Global Securities, to exchange them for other Debt Securities of the same series of any authorized denomination and of a like tenor and aggregate principal amount.

Holders of Debt Securities may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed, at the office of the transfer agent we designate for the purpose. We will not impose a service charge for any registration of transfer or exchange of Debt Securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place of payment for the Debt Securities.

If we redeem the Debt Securities, we will not be required to issue, register the transfer of or exchange any Debt Security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange any Debt Security selected for redemption, except the unredeemed portion of the Debt Security being redeemed.

Payment and Paying Agents. Unless otherwise stated in the prospectus supplement, we will pay principal and any premium or interest on a Debt Security to the person in whose name the Debt Security is registered at the close of business on the regular record date for such interest.

Unless otherwise stated in the prospectus supplement, we will pay principal and any premium or interest on the Debt Securities at the office of our designated paying agent, except we may pay interest by check mailed to the address of the person entitled to the payment. Unless we state otherwise in the prospectus supplement, the corporate trust office of the Trustee will be the paying agent for the Debt Securities.

Any other paying agents we designate for the Debt Securities of a particular series will be named in the prospectus supplement. We may designate additional paying agents, rescind the designation of any paying agent or approve a change in the office through which any paying agent acts, but we must maintain a paying agent in each place of payment for the Debt Securities.

The paying agent will return to us all money we pay to it for the payment of the principal, premium or interest on any Debt Security that remains unclaimed for a specified period. The holder thereafter may look only to us for payment.

Global Securities. The Debt Securities of any series may be represented by one or more global securities (each, a Global Security and, together, the Global Securities) that will have an aggregate principal amount equal to that of the Debt Securities of that series. Each Global Security will be registered in the name of a depository identified in the prospectus supplement. We will deposit the Global Security with the depository or a custodian, and the Global Security will bear a legend regarding the restrictions on exchanges and registration of transfer.

No Global Security may be exchanged in whole or in part for Debt Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any person other than the depository or any nominee of the depository unless (1) the

Table of Contents

depository has notified us that it is unwilling or unable to continue as depository or (2) an event of default occurs and continues with respect to the Debt Securities. The depository will determine how all securities issued in exchange for a Global Security will be registered.

As long as the depository or its nominee is the registered holder of a Global Security, the depository or the nominee will be considered the sole owner and holder of the Global Security and the underlying Debt Securities. Except as stated above, owners of beneficial interests in a Global Security will not be entitled to have the Global Security or any Debt Security registered in their names, will not receive physical delivery of certificated Debt Securities and will not be considered to be the owners or holders of the Global Security or underlying Debt Securities. We will make all payments of principal, premium and interest on a Global Security to the depository or its nominee. The laws of some jurisdictions require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may prevent you from transferring your beneficial interests in a Global Security.

Only institutions that have accounts with the depository or its nominee and persons that hold beneficial interests through the depository or its nominee may own beneficial interests in a Global Security. The depository will credit, on its book-entry registration and transfer system, the respective principal amounts of Debt Securities represented by the Global Security to the accounts of its participants. Ownership of beneficial interests in a Global Security will be shown only on, and the transfer of those ownership interests will be effected only through, records maintained by the depository or any such participant.

The policies and procedures of the depository may govern payments, transfers, exchanges and other matters relating to beneficial interests in a Global Security. We and the Trustee assume no responsibility or liability for any aspect of the depository's or any participant's records relating to, or for payments made on account of, beneficial interests in a Global Security.

The specific terms of the depository arrangement with respect to any series of Debt Securities will be described in the applicable prospectus supplement.

Consolidation, Merger and Sale of Assets. Each Indenture may provide that we may, without the consent of the holders of any of the Debt Securities outstanding under the applicable Indenture, consolidate with, merge into or transfer our assets substantially as an entirety to any person, provided that:

any successor assumes our obligations on the applicable Debt Securities and under the applicable Indenture;

after giving effect to the transaction, there is no Default or Event of Default that is continuing; and

certain other conditions under the applicable Indenture are met.

Accordingly, such consolidation, merger or transfer of assets substantially as an entirety, which meets the conditions described above, would not create any Event of Default which would entitle holders of the Debt Securities, or the Trustee on their behalf, to take any of the actions described below under Events of Default.

Leveraged and Other Transactions. Unless otherwise specified in the applicable prospectus supplement, the Indentures and the Debt Securities will not contain, among other things, provisions that would protect holders of the Debt Securities in the event of a highly leveraged or other transaction involving us that could adversely affect the holders of Debt Securities.

Modification of the Indentures; Waiver. Each Indenture may provide that, with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding Debt Securities of each affected series, modifications and alterations of such Indenture may be made that affect the rights of the holders of such Debt Securities. However, no such modification or alteration may be made without the consent of the holder of each Debt Security so affected which would, among other things:

change the maturity of the principal of, or of any installment of interest (or premium, if any) on, any Debt Security issued pursuant to such Indenture;

change the principal amount thereof, premium thereon, if any, or interest thereon;

change the method of calculation of interest or the currency of payment of principal or interest (or premium, if any) thereon;

reduce the minimum rate of interest thereon;

impair the right to bring suit for the enforcement of any such payment on or with respect to any such Debt Security;

Table of Contents

reduce the amount of principal of an Original Issue Discount Security that would be due and payable upon an acceleration of the maturity thereof;

reduce the above-stated percentage in principal amount of outstanding Debt Securities of any series required to modify or alter such Indenture;

in the case of Subordinated Debt Securities, modify the subordination provisions in a manner materially adverse to their holders;

in the case of Debt Securities that are convertible or exchangeable into our other securities, adversely affect the right of holders to convert or exchange any of the Debt Securities;

reduce the percentage in principal amount of outstanding Debt Securities of any series necessary for waiver of compliance with certain provisions of an Indenture or for waiver of certain defaults;

modify provisions with respect to modification and waiver; or

change our obligation to maintain an office or agency as required by the applicable Indenture.

The holders of a majority in aggregate principal amount of the outstanding Debt Securities of any series may waive, on behalf of the holders of all Debt Securities of that series, our compliance with certain restrictive provisions of any Indenture. Prior to the acceleration of the maturity of the Debt Securities of any series outstanding under an Indenture, the holders of a majority in aggregate principal amount of the outstanding Debt Securities of any series may waive any past default under an Indenture with respect to Debt Securities of that series, except a default (1) in the payment of principal, premium or interest on any Debt Security of that series or (2) in respect of a covenant or provision of an Indenture that cannot be amended without each holder's consent.

Except in certain limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding Debt Securities of any series entitled to give or take any direction, notice, consent, waiver or other action under an Indenture. In certain limited circumstances, the Trustee may set a record date for action by holders. To be effective, the action must be taken by holders of the requisite principal amount of such Debt Securities within a specified period following the record date.

Events of Default. An Event of Default with respect to the Debt Securities of any series may be defined in an applicable Indenture as:

default in the payment of principal of or premium, if any, on any Debt Security of that series when due, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the Subordinated Indenture;

default in the payment of interest on any Debt Security of that series when due, which continues for 30 days, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the Subordinated Indenture;

failure to deposit any sinking fund payment, when due, in respect of any Debt Security of that series, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the subordination provisions of the Subordinated Indenture;

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

default in the performance by us of any of our other covenants in the applicable Indenture with respect to the Debt Securities of such series, which continues for 90 days after written notice by the Trustee or the holders of at least 25% in aggregate principal amount of the Debt Securities of that series;

certain events of bankruptcy, insolvency or reorganization affecting us; and

any other event that may be specified in a prospectus supplement with respect to any series of Debt Securities.

If an Event of Default (other than an Event of Default relating to events of bankruptcy, insolvency or reorganization) with respect to any series of Debt Securities occurs and is continuing, either the Trustee or the holders of at least 25% in aggregate principal amount of the Debt Securities of such series outstanding may declare the principal amount (or if such Debt Securities are Original Issue Discount Securities, such portion of the principal amount as may be specified in the terms of that series) of all Debt Securities of that series to be immediately due and payable. If an Event of Default relating to events of bankruptcy, insolvency or reorganization with respect to the Debt Securities of any series at the time outstanding shall occur, the principal amount of all the Debt Securities of that series (or, in the case of any such Original Issue Discount Security, such specified amount) will automatically, and without any action by the applicable Trustee or any holder, become immediately due and payable. After any such acceleration, but before a judgment or decree based on acceleration, the holders of a majority in principal amount of the outstanding Debt Securities of that

Table of Contents

series may, under certain circumstances, rescind and annul such acceleration if all Events of Default, other than the non-payment of accelerated principal (or other specified amount), have been cured or waived as provided in the applicable Indenture. For information as to waiver of defaults, see Modification of the Indentures; Waiver.

If an Event of Default occurs and is continuing, the Trustee may, in its discretion, and at the written request of holders of not less than a majority in aggregate principal amount of the Debt Securities of any series, and upon reasonable indemnity against the costs, expenses and liabilities to be incurred in compliance with such request and subject to certain other conditions set forth in the applicable Indenture will, proceed to protect the rights of the holders of all the Debt Securities of such series.

The Indentures will provide that upon the occurrence of an Event of Default relating to payments of principal of, premium, if any, or interest on any Debt Security, we will, upon demand of the Trustee, pay to it, for the benefit of the holder of any such Debt Security, the whole amount then due and payable on such Debt Securities for principal, premium, if any, and interest. The Indentures will further provide that that if we fail to pay such amount upon such demand, the Trustee may, among other things, institute a judicial proceeding for the collection of the amount due.

No holder of a Debt Security of any series may institute any proceeding with respect to an Indenture, or for the appointment of a receiver or a trustee, or for other remedy, unless (1) the holder has previously given the Trustee written notice of a continuing event of default, (2) the holders of at least 25% in aggregate principal amount of the outstanding Debt Securities of that series have made a written request, and the holders have offered reasonable indemnity to the Trustee to institute the proceeding, and (3) the Trustee has failed to institute the proceeding, and has not received a direction inconsistent with the request within 60 days of such notice. The Indenture may also provide that, notwithstanding any other provision of the applicable Indenture, the holder of any Debt Security of any series will have the right to institute suit for the enforcement of any payment of principal of, premium, if any, and interest on such Debt Securities when due and that such right will not be impaired without the consent of such holder.

We are required to file annually with the applicable Trustee a written statement as to the existence or non-existence of defaults under the Indentures or the Debt Securities.

Subordination of the Subordinated Debt Securities. The Subordinated Debt Securities will be our direct, unsecured obligations and, unless otherwise specified in the prospectus supplement relating to a particular series of Subordinated Debt Securities offered by such prospectus supplement, will be subject to the subordination provisions described in this section. Upon any distribution of our assets due to any dissolution, winding up, liquidation or reorganization, the payment of the principal of, premium, if any, and interest on the Subordinated Debt Securities is to be subordinated in right of payment to all Senior Indebtedness. In certain events of bankruptcy or insolvency, the payment of the principal of and interest on the Subordinated Debt Securities will, to the extent provided in a Subordinated Indenture, also be effectively subordinated in right of payment to all General Obligations (as defined below).

Upon any distribution of our assets due to any dissolution, winding up, liquidation or reorganization, the holders of Senior Indebtedness will first be entitled to receive payment in full of all amounts due or to become due before the holders of the Subordinated Debt Securities will be entitled to receive any payment in respect of the Subordinated Debt Securities. If upon any such payment or distribution of assets, after giving effect to such subordination provisions in favor of the holders of Senior Indebtedness, (i) there remain any amounts of cash, property or securities available for payment or distribution in respect of the Subordinated Debt Securities (Excess Proceeds) and (ii) if, at such time, any creditors in respect of General Obligations have not received payment in full of all amounts due or to become due on or in respect of such General Obligations, then such Excess Proceeds will first be applied to pay or provide for the payment in full of such General Obligations before any payment or distribution may be made in respect of the Subordinated Debt Securities.

In addition, no payment may be made on the Subordinated Debt Securities, or in respect of any redemption, retirement, purchase or other acquisition of any of the Subordinated Debt Securities, at any time in the event:

there is a default in the payment of the principal of, premium, if any, interest on or otherwise in respect of any Senior Indebtedness; or

any event of default with respect to any Senior Indebtedness has occurred and is continuing or would occur as a result of such payment on the Subordinated Debt Securities or any redemption, retirement, purchase or other acquisition of any of the Subordinated Debt Securities, permitting the holders of such Senior Indebtedness to accelerate the maturity thereof.

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

Except as described above, our obligation to make payments of the principal of, premium, if any, or interest on the Subordinated Debt Securities will not be affected.

By reason of the subordination in favor of the holders of Senior Indebtedness, in the event of a distribution of assets upon any dissolution, winding up, liquidation or reorganization, our creditors who are not holders of Senior Indebtedness or the Subordinated Debt Securities may recover less, proportionately, than holders of Senior Indebtedness and may recover more, proportionately, than holders of the Subordinated Debt Securities.

Table of Contents

Subject to payment in full of all Senior Indebtedness, the holders of Subordinated Debt Securities will be subrogated to the rights of the holders of Senior Indebtedness to receive payments or distributions of cash, property or our securities applicable to Senior Indebtedness. Subject to payment in full of all General Obligations, the holders of the Subordinated Debt Securities will be subrogated to the rights of the creditors in respect of General Obligations to receive payments or distributions of cash, property or our securities applicable to such creditors in respect of General Obligations.

Senior Indebtedness for purposes of a Subordinated Indenture is the principal of, premium, if any, and interest on:

all of our indebtedness for money borrowed (other than (i) the Subordinated Debt Securities and (ii) the Junior Subordinated Indebtedness (as defined below)) whether outstanding on the date of execution of the Subordinated Indenture or created, assumed or incurred after that date, except such indebtedness as is by its terms expressly stated to be not superior in right of payment to the Subordinated Debt Securities or to rank equally with the Subordinated Debt Securities; and

any deferrals, renewals or extensions of any such Senior Indebtedness.

The term indebtedness for money borrowed as used in this prospectus includes, without limitation, any obligation of, or any obligation guaranteed by us for the repayment of borrowed money, whether or not evidenced by bonds, debentures, notes or other written instruments, and any deferred obligation for the payment of the purchase price of property or assets. A Subordinated Indenture would not limit our issuance of additional Senior Indebtedness.

The Subordinated Debt Securities will rank senior in right of payment to our Junior Subordinated Indebtedness upon any distribution of our assets due to any dissolution, winding up, liquidation or reorganization, to the extent provided in the instruments creating our Junior Subordinated Indebtedness. Junior Subordinated Indebtedness is the principal of, premium, if any, and interest on:

all of our indebtedness for money borrowed whether outstanding on the date of the execution of a Subordinated Indenture or created, assumed or incurred after that date that is by its terms subordinated to the Subordinated Debt Securities; and

any deferrals, renewals or extensions of any of such Junior Subordinated Indebtedness.

Unless otherwise specified in the prospectus supplement relating to a particular series of Subordinated Debt Securities offered thereby, the term General Obligations means all obligations to make payment on account of claims in respect of derivative products such as interest and foreign exchange rate contracts, commodity contracts and similar arrangements, other than:

obligations on account of Senior Indebtedness;

obligations on account of indebtedness for money borrowed ranking equal with or subordinate to the Subordinated Debt Securities; and

obligations which by their terms are expressly stated not to be senior in right of payment to the Subordinated Debt Securities or to rank equally with the Subordinated Debt Securities.

Unless otherwise specified in the prospectus supplement relating to any series of Subordinated Debt Securities, payment of principal of the Subordinated Debt Securities may be accelerated only in case of the bankruptcy, insolvency or reorganization of our company.

Defeasance and Covenant Defeasance. To the extent stated in the prospectus supplement, we may elect to apply the provisions relating to defeasance and discharge of indebtedness, or to defeasance of certain restrictive covenants in the Indentures, to the Debt Securities of any series.

8% Senior Unsecured Convertible Notes

On June 25, 2013, we issued, in an underwritten public offering, \$38 million aggregate principal amount of 8% Senior Unsecured Convertible Notes due June 15, 2018 (the Notes). Interest will be payable in arrears in cash or shares of our common stock, at our option, on December 15 and June 15 of each year. If paid in shares, such shares will be valued at a 7.5% discount to market price.

The Notes are our senior unsecured obligations. They are convertible to our common shares at any time at an initial conversion rate of 645.1613 shares of our common stock per \$1,000 principal amount of the Notes (equivalent to an initial conversion price of approximately \$1.55 per share). The conversion rate may be adjusted under certain circumstances. We are not obligated to issue shares of our common stock upon conversion of the Notes and will not be able to pay interest on the Notes in shares of common stock to the extent the issuance of such shares would exceed, in the aggregate, 19.9% of our outstanding common stock on the date the Notes were issued (including shares of common stock issued as interest on the Notes and as conversion of the Notes, unless we obtain the prior approval of our stockholders). The Notes are also not convertible to the extent that any holder or any of its affiliates would beneficially own in excess of 4.99% of our outstanding common stock.

If we undergo a change of control, we are obligated to offer to buy the Notes at a premium. If a purchaser of FuelCell does not assume the Notes, we are obligated to buy, and the holders are obligated to sell, the Notes at a premium.

If some or all of the Notes are converted, in addition to the consideration upon conversion, each holder of the Notes will receive cash or a number of additional common shares equal to the aggregate amount of accrued and unpaid interest plus interest that would have been payable on the converted Notes through the earlier of (i) three years, or (ii) the maturity date of the Notes. If this premium is paid in shares, such shares will be valued at a 7.5% discount to market price and will be subject to the 19.9% limitation described above.

For a complete and detailed description of the terms and conditions of the Notes, see the Prospectus Supplement and the Current Report on Form 8-K, each filed with the SEC on June 20, 2013.

Table of Contents

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the rights of our common stock and preferred stock and related provisions of our certificate of incorporation and bylaws. For more detailed information, please see our certificate of incorporation and bylaws, as amended.

Authorized and Outstanding Capital Stock

Our authorized capital stock consists of 275,000,000 shares of common stock, par value \$.0001 per share, and 250,000 shares of preferred stock, par value \$.01 per share, issuable in one or more series designated by our board of directors, of which 105,875 shares of our preferred stock have been designated as 5% Series B Cumulative Convertible Perpetual Preferred Stock (Series B preferred stock). On April 30, 2013, 191,936,178 shares of our common stock were issued and outstanding and 64,020 shares of our Series B preferred stock were issued and outstanding. No other shares of our preferred stock are issued and outstanding. There are Series 1 preferred shares of our Canadian subsidiary, FuelCell Energy, Ltd., issued and outstanding and convertible into shares of FuelCell Energy, Inc. common stock.

In addition, as of April 30, 2013, there were outstanding options to purchase 3,221,539 shares of our common stock under our equity incentive plans, 989,724 shares of our common stock were available for future issuance under our equity incentive plans, and 666,365 shares of our common stock were available for future issuance under our employee stock purchase plan. In addition, as of April 30, 2013, we were obligated, if and when the holder exercises its conversion rights, to issue approximately 14,625,730 shares of our common stock upon conversion of the Series 1 preferred shares. As of April 30, 2013, there were 544 holders of record of our common stock.

Common Stock

Voting Rights

The holders of our common stock have one vote per share. Holders of our common stock are not entitled to vote cumulatively for the election of directors. Generally, all matters to be voted on by shareholders must be approved by a majority, or, in the case of the election of directors, by a plurality, of the votes entitled to be cast at a meeting at which a quorum is present by all shares of our common stock present in person or represented by proxy, voting together as a single class, subject to any voting rights granted to holders of any then outstanding preferred stock.

Dividends

Holders of our common stock will share ratably in any dividends declared by the board of directors, subject to the preferential rights of any of our preferred stock then outstanding. Dividends consisting of shares of our common stock may be paid to holders of shares of our common stock.

Other Rights

In the event of our liquidation, dissolution or winding up, after payment of liabilities and liquidation preferences on any of our preferred stock then outstanding, the holders of shares of our common stock are entitled to share ratably in all assets available for distribution. Holders of shares of our common stock have no preemptive rights or rights to convert their shares of our common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock.

Preferred Stock

This section describes the general terms of our preferred stock, \$.01 par value, to which any prospectus supplement may relate. Certain terms of any series of our preferred stock offered by any prospectus supplement will be described in such prospectus supplement. If so indicated in the prospectus supplement, the terms of that series may differ from the terms described below. The provisions of our preferred stock described below are not complete. You should refer to our certificate of incorporation and any certificate of amendment to our certificate of incorporation or certificate of designations filed with the SEC in connection with the offering of our preferred stock.

Under our certificate of incorporation, our board of directors has the authority, without further shareholder action, to issue from time to time, preferred stock in one or more series and for such consideration as may be fixed from time to time by our board of directors. Our board also has the authority to fix and determine, in the manner provided by law, the relative rights and preferences of the shares of any series so established,

such as dividend and voting rights. Our certificate of incorporation authorizes 250,000 shares

Table of Contents

of preferred stock. Prior to the issuance of each series of preferred stock, our board will adopt resolutions creating and designating the series as a series of preferred stock. The board of directors may, without shareholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of our common stock and could have anti-takeover effects.

Our preferred stock will have the dividend, liquidation, redemption, voting and conversion rights set forth below unless otherwise specified in the applicable prospectus supplement. You should read the prospectus supplement relating to the particular series of preferred stock offered thereby for specific terms, including:

the designation, stated value and liquidation preference of such preferred stock and the number of shares offered;

the initial public offering price at which the preferred stock will be issued;

the dividend rate or rates (or method of calculation), the dividend periods, the date on which dividends will be payable and whether such dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends will begin to cumulate;

any redemption or sinking fund provisions;

any conversion provisions; and

any additional rights, preferences, privileges, qualifications, limitations and restrictions of the preferred stock.

Unless otherwise specified in the applicable prospectus supplement, the shares of each series of preferred stock will upon issuance rank equally in all respects with each other then outstanding series of preferred stock.

Preferred stock could be issued quickly with terms that could delay or prevent a change of control or make the removal of management more difficult. Additionally, the issuance of preferred stock may decrease the market price of our common stock and may adversely affect the voting and other rights of the holders of our common stock.

Ranking

Any series of our preferred stock will, with respect to dividend rights and rights on liquidation, winding up or dissolution, rank:

senior to all classes of our common stock and to all equity securities issued by us, the terms of which specifically provide that the equity securities will rank junior to that preferred stock;

equally with all equity securities issued by us, the terms of which specifically provide that the equity securities will rank equally with that preferred stock; and

junior to all equity securities issued by us, the terms of which specifically provide that the equity securities will rank senior to that preferred stock.

Dividends

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

The holders of our preferred stock will be entitled to receive, when, as and if declared by our board of directors, dividends at such rates and on such dates as will be specified in the applicable prospectus supplement. Such rates may be fixed or variable or both. If variable, the formula used for determining the dividend rate for each dividend period will be specified in the applicable prospectus supplement. Dividends will be payable to the holders of record as they appear on our stock books on such record dates as will be fixed by our board. Dividends may be paid in the form of cash, preferred stock (of the same or a different series) or our common stock, in each case as specified in the applicable prospectus supplement.

Dividends on any series of our preferred stock may be cumulative or noncumulative, as specified in the applicable prospectus supplement. If the dividends on a series of our preferred stock are noncumulative (Noncumulative Preferred Stock), and our board of directors fails to declare a dividend payable on a dividend payment date, then the holders of such preferred stock will have no right to receive a dividend in respect to the dividend period relating to such dividend payment date, and we will not be obligated to pay the dividend accrued for such period, whether or not dividends on such preferred stock are declared or paid on any future dividend payment dates.

Table of Contents

We will not declare or pay or set apart for payment any dividends on any series of our preferred stock that rank, as to dividends, on a parity with or junior to the outstanding preferred stock of any series unless (i) if such outstanding preferred stock has a cumulative dividend (Cumulative Preferred Stock), full cumulative dividends have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof set apart for such payment on such preferred stock for all dividend periods terminating on or prior to the date of payment of any such dividends on such other series of the preferred stock or (ii) if such outstanding preferred stock is Noncumulative Preferred Stock, full dividends for the then-current dividend period on such preferred stock have been or contemporaneously are declared and paid or declared and a sum sufficient for the payment thereof set apart for such payment.

Until full dividends are paid (or declared and payment is set aside) on our preferred stock ranking equal as to dividends, then:

we will declare any dividends pro rata among the preferred stock of each series and any preferred stock ranking equal to such preferred stock as to dividends (i.e., the dividends we declare per share on each series of such preferred stock will bear the same relationship to each other that the full accrued dividends per share on each such series of the preferred stock (which will not, if such preferred stock is Noncumulative Preferred Stock, include any accumulation in respect to unpaid dividends for prior dividend periods) bear to each other);

other than such pro rata dividends, we will not declare or pay any dividends or declare or make any distributions upon any security ranking junior to or equal with the preferred stock as to dividends or upon liquidation (except dividends on common stock payable in common stock, dividends or distributions paid for with securities ranking junior to the preferred stock as to dividends and upon liquidation and cash in lieu of fractional shares in connection with such dividends); and

we will not redeem, purchase or otherwise acquire (or set aside money for a sinking fund for) our common stock or any other securities ranking junior to or equal with the preferred stock as to dividends or upon liquidation (except by conversion into or exchange for stock junior to the preferred stock as to dividends and upon liquidation).

We will not owe any interest, or any money in lieu of interest, on any dividend payment on any series of the preferred stock that may be past due.

Redemption

A series of our preferred stock may be redeemable, in whole or in part, at our option, and may be subject to mandatory redemption pursuant to a sinking fund or otherwise, in each case upon terms, at the times and at the redemption prices specified in the applicable prospectus supplement. Redeemed shares of our preferred stock will become authorized but unissued shares of preferred stock that we may issue in the future.

The prospectus supplement relating to a series of our preferred stock that is subject to mandatory redemption will specify the number of shares of such preferred stock that we will redeem each year and the redemption price per share. If shares of our preferred stock are redeemed, we will pay all accrued and unpaid dividends thereon (which will not, if such preferred stock is Noncumulative Preferred Stock, include any accumulation in respect of unpaid dividends for prior dividend periods) up to but excluding the date of redemption. The redemption price may be payable in cash or other property, as specified in the applicable prospectus supplement. If the redemption price for our preferred stock of any series is payable only from the net proceeds of the issuance of our capital stock, the terms of such preferred stock may provide that, if no such capital stock will have been issued or to the extent the net proceeds from any issuance are insufficient to pay in full the aggregate redemption price then due, such preferred stock will automatically and mandatorily be converted into shares of our applicable capital stock pursuant to conversion provisions specified in the applicable prospectus supplement.

If fewer than all the outstanding shares of our preferred stock of any series are to be redeemed, our board will determine the number of shares to be redeemed. We will redeem the shares pro rata from the holders of record of such shares in proportion to the number of such shares held by such holders (with adjustments to avoid redemption of fractional shares) or by lot or by any other method as may be determined by our board.

Even though the terms of a series of the Cumulative Preferred Stock may permit redemption of such preferred stock in whole or in part, if any dividends, including accumulated dividends, on that series are past due:

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

we will not redeem any preferred stock of that series unless we simultaneously redeem all outstanding preferred stock of that series; and

we will not purchase or otherwise acquire any preferred stock of that series.

Table of Contents

The prohibition discussed in the preceding sentence will not prohibit us from purchasing or acquiring preferred stock of that series pursuant to a purchase or exchange offer if we make the offer on the same terms to all holders of that series.

Conversion Rights

The prospectus supplement relating to a series of convertible preferred stock will describe the terms on which shares of such series are convertible into our common stock.

Rights Upon Liquidation

Unless the applicable prospectus supplement states otherwise, if we voluntarily or involuntarily liquidate, dissolve or wind up our business, the holders of our preferred stock will be entitled to receive out of our assets available for distribution to stockholders, before any distribution of assets is made to holders of our common stock or any other class or series of shares ranking junior to such preferred stock upon liquidation, liquidating distributions in the amount of the liquidation preference of such preferred stock plus accrued and unpaid dividends (which will not, if such preferred stock is Noncumulative Preferred Stock, include any accumulation in respect of unpaid dividends for prior dividend periods). If we voluntarily or involuntarily liquidate, dissolve or wind up our business and the amounts payable with respect to our preferred stock of any series and any of our other securities ranking equal as to any such distribution are not paid in full, the holders of such preferred stock and of such other shares will share ratably in any such distribution of our assets in proportion to the full respective preferential amounts to which they are entitled. After payment of the full amount of the liquidating distribution to which they are entitled, the holders of our preferred stock of any series will not be entitled to any further participation in any distribution of our assets.

Voting Rights

Except as described in this section or in the applicable prospectus supplement, or except as expressly required by applicable law, the holders of our preferred stock will not be entitled to vote. If the holders of a series of our preferred stock are entitled to vote and the applicable prospectus supplement does not state otherwise, each such share will be entitled to one vote on matters on which holders of such series of preferred stock are entitled to vote. For any series of our preferred stock having one vote per share, the voting power of such series, on matters on which holders of such series and holders of other series of our preferred stock are entitled to vote as a single class, will depend on the number of shares in such series, not the aggregate stated value, liquidation preference or initial offering price of the shares of such series of preferred stock.

Unless we receive the consent of the holders of an outstanding series of preferred stock and the outstanding shares of all other series of preferred stock which (i) rank equal with such series either as to dividends or the distribution of assets upon liquidation, dissolution or winding up of our business and (ii) have voting rights that are exercisable and that are similar to those of such series, we will not:

authorize, create or issue, or increase the authorized or issued amount of, any class or series of stock ranking prior to such outstanding preferred stock with respect to payment of dividends or the distribution of assets upon liquidation, dissolution or winding up of our business; or

amend, alter or repeal, whether by merger, consolidation or otherwise, the provisions of our certificate or of the resolutions contained in any certificate of designations creating such series of preferred stock so as to materially and adversely affect any right, preference privilege or voting power of such outstanding preferred stock.

This consent must be given by the holders of a majority of all such outstanding preferred stock described in the preceding sentence, voting together as a single class. We will not be required to obtain this consent with respect to the actions listed in the second bullet point above, however, if we only (i) increase the amount of the authorized preferred stock, (ii) create and issue another series of preferred stock, or (iii) increase the amount of authorized shares of any series of preferred stock, if such preferred stock in each case ranks equal with or junior to the preferred stock with respect to the payment of dividends and the distribution of assets upon liquidation, dissolution or winding up of our business.

Series B Preferred Stock

On November 11, 2004, we entered into a purchase agreement with Citigroup Global Markets Inc., RBC Capital Markets Corporation, Adams Harkness, Inc., and Lazard Freres & Co., LLC (the Initial Purchasers) for the private placement under Rule 144A of up to 135,000 shares of our

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

5% Series B Cumulative Convertible Perpetual Preferred Stock (Liquidation Preference \$1,000). On November 17, 2004 and January 25, 2005, we closed on the sale of 100,000 shares and 5,875 shares, respectively, of Series B preferred stock to the Initial Purchasers.

Table of Contents

At April 30, 2013, there were 250,000 preferred shares authorized of which 64,020 Series B preferred shares were issued and outstanding.

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

Ranking

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

senior to shares of our common stock;

junior to our debt obligations; and

effectively junior to our subsidiaries (i) existing and future liabilities and (ii) capital stock held by others.

Dividends

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

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

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

The dividend on the Series B preferred stock may be paid in cash; or at the option of the holder, in shares of our common stock, which will be registered pursuant to a registration statement to allow for the immediate sale of these common shares in the public market. Dividends of \$1.6 million were paid in cash for the six months ended April 30, 2013. \$3.2 million were paid in cash in each of the years ended October 31, 2012, 2011 and 2010. There were no cumulative unpaid dividends at April 30, 2013

Liquidation

The Series B preferred stock stockholders are entitled to receive, in the event that we are liquidated, dissolved or wound up, whether voluntary or involuntary, \$1,000 per share plus all accumulated and unpaid dividends to the date of that liquidation, dissolution, or winding up (Liquidation Preference). Until the holders of Series B preferred stock receive their Liquidation Preference in full, no payment will be made on any junior shares, including shares of our common stock. After the Liquidation Preference is paid in full, holders of the Series B preferred stock will not be entitled to receive any further distribution of our assets. At April 30, 2013 and October 31, 2012, the Series B preferred stock had a Liquidation Preference of \$64.0 million.

Conversion Rights

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

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

Beginning after November 20, 2009 we may, at our option, cause shares of Series B Preferred Stock to be automatically converted into that number of shares of our common stock that are issuable at the then prevailing conversion rate. We may exercise our conversion right only if the closing price of our common stock exceeds 150 percent of the then prevailing conversion price (\$11.75 at January 31, 2013) for 20 trading days during any consecutive 30 trading day period, as described in the Certificate of Designation.

Table of Contents

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

The adjustment of the conversion price is to prevent dilution of the interests of the holders of the Series B Preferred Stock from the following:

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

Common stock share splits or share combinations;

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

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

Redemption

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

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

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

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

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

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

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

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

at least 90 percent of the consideration (excluding cash payments for fractional shares) and, in respect of dissenters' appraisal rights, if the transaction constituting the fundamental change consists of shares of capital stock traded on a U.S.

Table of Contents

national securities exchange, or which will be so traded or quoted when issued or exchanged in connection with a fundamental change, and as a result of the transaction, shares of Series B Preferred Stock become convertible into such publicly traded securities; or

in the case of fundamental change event in the fourth bullet above, the transaction is affected solely to change our jurisdiction of incorporation.

We may, at our option, elect to pay the redemption price in cash or, in shares of our common stock valued at a discount of 5 percent from the market price of shares of our common stock, or any combination thereof. Notwithstanding the foregoing, we may only pay such redemption price in shares of our common stock that are registered under the Securities Act of 1933 and eligible for immediate sale in the public market by non-affiliates of the Company.

Voting Rights

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

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

Series 1 Preferred Shares

In connection with our acquisition of Global Thermolectric Inc. (Global) in November 2003, we acquired the obligations of Global pursuant to its outstanding 1,000,000 Series 2 Preferred Shares (Series 2 Preferred Shares) which continued to be held by Enbridge, Inc. With the sale of Global in May of 2004, the Series 2 Preferred Shares were cancelled, and replaced with substantially equivalent Series 1 Preferred Shares (Series 1 Preferred Shares) issued by FCE FuelCell Energy Ltd. (FCE Ltd).

On March 31, 2011, the Company entered into an agreement with Enbridge, Inc. (Enbridge) to modify the Class A Cumulative Redeemable Exchangeable Preferred Shares agreement (the Series 1 preferred share agreement) between FCE Ltd, a wholly-owned subsidiary of FuelCell Energy, and Enbridge, the sole holder of the Series 1 preferred shares. Consistent with the previous Series 1 preferred share agreement, FuelCell continues to guarantee the return of principal and dividend obligations of FCE Ltd. to the Series 1 preferred shareholders under the modified agreement.

Under the original Series 1 Preferred Shares provisions, FCE Ltd. had an accrued and unpaid dividend obligation of approximately Cdn. \$12.5 million representing the deferral of dividends plus additional dividends thereon. Payment was originally due to Enbridge as of December 31, 2010, but was subsequently extended based on mutual consent. Under the modified share provisions, the Company is required to make (i) equal quarterly return of capital cash payments to the holders of the Series 1 Preferred Shares on the last day of each calendar quarter starting on March 31, 2011 and ending on December 31, 2011 and (ii) additional return of capital cash payments, as consideration for the one-year deferral, calculated at a 9.8 percent rate per annum on the unpaid Cdn. \$12.5 million obligation, which additional payments will also be made to the holders of the Series 1 Preferred Shares on the last day of each calendar quarter starting on March 31, 2011 and ending on December 31, 2011. Dividends accrue at a 1.25% quarterly rate on the unpaid principal balance, and additional dividends will accrue on the cumulative unpaid dividends (inclusive of the Cdn\$12.5 million unpaid dividend balance as of the modification date) at a rate of 1.25% per quarter, compounded quarterly.

Under the original Series 1 Preferred Shares provisions, FCE Ltd. was to make annual dividend payments totaling Cdn. \$1,250,000. The modified terms of the Series 1 Preferred Shares adjust these payments to (i) annual dividend payments of Cdn\$500,000 and (ii) annual return of capital payments of Cdn. \$750,000. These payments commenced on March 31, 2011 and will end on December 31, 2020. Additional dividends

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

accrue on cumulative unpaid dividends at a 1.25 percent quarterly rate, compounded quarterly, until payment thereof. On December 31, 2020 the amount of all accrued and unpaid dividends on the Series 1 Preferred Shares of Cdn\$21.1 million and the balance of the principal redemption price of Cdn\$4.4 million shall be paid to the holders of the Series 1 Preferred Shares. FCE Ltd. has the option of making dividend payments in the form of common stock or cash under the Series 1 Preferred Shares provisions.

Table of Contents

On March 31, 2011, the modified instrument had a carrying value of Cdn. \$25.2 million. The Company assessed the accounting guidance related to the classification of the preferred shares after the modification on March 31, 2011 and concluded that the preferred shares should be classified as a mandatorily redeemable financial instrument, and presented as a liability on the consolidated balance sheet. Due to the reclassification of the instrument to a liability, the Company has accounted for this modification of the Series 1 Preferred shares as an extinguishment and therefore the difference between the fair value of the consideration transferred to the holders of the preferred stock and the carrying amount of the preferred stock on our balance sheet prior to the modification represented a return to the preferred stockholder and treated in a manner similar to the treatment of dividends paid on preferred stock. Accordingly, the difference between (1) the fair value of the Series 1 Preferred shares and (2) the carrying amount of the Series 1 Preferred shares on our balance sheet prior to the modification was subtracted from net loss to arrive at loss to common stockholders in the calculation of earnings per share.

The previous model used to value the original Series I Preferred shares was modified to value the pre-modification contract, to reflect the new cash-flows discussed above. The notional amount of the instrument is accreted beginning in 2011 to correspond to the initial four quarterly returns of capital payments in 2011 and to the quarterly \$187,500 paid from 2011-2020 as return of capital. It is assumed that the Company will exercise the call option to force conversion in 2020. The conversion feature is modeled using a lattice approach. Call option strikes are adjusted for cumulative dividends and the conversion ratio is adjusted by the notional schedule. The stock is projected in the future assuming a log-normal distribution. The stock volatility, the interest rate curve, the foreign exchange rates and credit spreads are assumed to be deterministic. The cumulative dividend is modeled as a quarterly cash dividend component and a cumulative payment in 2020.

The revaluation of the Series 1 Preferred shares resulted in a reduction of additional paid in capital of \$9.0 million, which was also presented on the consolidated statements of operations as a charge to modification of redeemable preferred stock of subsidiary to arrive at net loss to common shareholders and was included in the calculation of earnings per share for net loss to common shareholders. The reason for the change in the value of the obligation was that the original obligation had been accounted for under purchase price accounting at the time of the Global Thermoelectric Inc. acquisition in November 2003. The valuation at that time included a market risk discount and used the exchange rate at the time of the acquisition. Under the new valuation, the future estimated cash flows were discounted using the current exchange rate.

The Company made its scheduled return of capital and dividend payments of \$0.6 million (Cdn. \$0.6 million) during the six months ended April 30, 2013. The Company made its scheduled payments of Cdn.\$4.4 million and Cdn. \$10.9 million during fiscal 2012 and 2011, respectively, under the terms of the modified agreement, including the recording of interest expense of approximately of Cdn. 2.0 million and Cdn. \$2.3 million, respectively for fiscal 2012 and 2011, respectively. As of April 30, 2013, the carrying value of the Series 1 Preferred shares was Cdn.\$14.6 million (\$14.42 million USD) and is classified as preferred stock obligation of subsidiary on the consolidated balance sheets.

In addition to the above, the significant terms of the Series 1 Preferred Shares include the following:

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

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

Redemption - The Series 1 Preferred Shares are redeemable by FCE Ltd for Cdn.\$25 per share less any amounts paid as a return of capital in respect of such share plus all unpaid dividends and accrued interest. Holders of the Series 1 Preferred Shares do not have any mandatory or conditional redemption rights.

Table of Contents

Liquidation or Dissolution - In the event of the liquidation or dissolution of FCE Ltd, the holders of Series 1 Preferred Shares will be entitled to receive Cdn.\$25 per share less any amounts paid as a return of capital in respect of such share plus all unpaid dividends and accrued interest. The Company has guaranteed any liquidation obligations of FCE Ltd.

Exchange Rights - A holder of Series 1 Preferred Shares has the right to exchange such shares for fully paid and non-assessable common stock of the Company at the following exchange prices:

Cdn\$129.46 per share of common stock after July 31, 2010 until July 31, 2015;

Cdn\$138.71 per share of common stock after July 31, 2015 until July 31, 2020; and

at any time after July 31, 2020, at a price equal to 95 percent of the then current market price (in Cdn.\$) of the Company's common stock at the time of conversion.

The exchange rates set forth above shall be adjusted if the Company: (i) subdivides or consolidates the common stock; (ii) pays a stock dividend; (iii) issues rights, options or other convertible securities to the Company's common stockholders enabling them to acquire common stock at a price less than 95 percent of the then-current price; or (iv) fixes a record date to distribute to the Company's common stockholders shares of any other class of securities, indebtedness or assets.

Anti-Takeover Provisions

Provisions of our Certificate of Incorporation and By-Laws

A number of provisions of our certificate of incorporation and by-laws concern matters of corporate governance and the rights of shareholders. Some of these provisions, including, but not limited to, the inability of shareholders to take action by unanimous written consent, supermajority voting provisions with respect to any amendment of voting rights provisions, the filling of vacancies on the board of directors by the affirmative vote of a majority of the remaining directors, and the ability of the board of directors to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof, without further shareholder action, may be deemed to have anti-takeover effect and may discourage takeover attempts not first approved by the board of directors, including takeovers which shareholders may deem to be in their best interests. If takeover attempts are discouraged, temporary fluctuations in the market price of shares of our common stock, which may result from actual or rumored takeover attempts, may be inhibited. These provisions, together with the ability of the board of directors to issue preferred stock without further shareholder action, could also delay or frustrate the removal of incumbent directors or the assumption of control by shareholders, even if the removal or assumption would be beneficial to our shareholders. These provisions could also discourage or inhibit a merger, tender offer or proxy contest, even if favorable to the interests of shareholders, and could depress the market price of our common stock. The board of directors believes these provisions are appropriate to protect our interests and the interests of our shareholders. The board of directors has no present plans to adopt any further measures or devices which may be deemed to have an anti-takeover effect.

Delaware Anti-Takeover Provisions

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits a publicly-held Delaware corporation from engaging in a business combination, except under certain circumstances, with an interested shareholder for a period of three years following the date such person became an interested shareholder unless:

before such person became an interested shareholder, the board of directors of the corporation approved either the business combination or the transaction that resulted in the interested shareholder becoming an interested shareholder;

upon the consummation of the transaction that resulted in the interested shareholder becoming an interested shareholder, the interested shareholder owned at least 85 percent of the voting stock of the corporation outstanding at the time the transaction

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

commenced, excluding shares held by directors who are also officers of the corporation and shares held by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

at or following the time such person became an interested shareholder, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of shareholders (and not by written consent) by the affirmative vote of the holders of at least $66 \frac{2}{3}$ percent of the outstanding voting stock of the corporation which is not owned by the interested shareholder.

The term interested shareholder generally is defined as a person who, together with affiliates and associates, owns, or, within the three years prior to the determination of interested shareholder status, owned, 15 percent or more of a corporation's outstanding

Table of Contents

voting stock. The term "business combination" includes mergers, asset or stock sales and other similar transactions resulting in a financial benefit to an interested shareholder. Section 203 makes it more difficult for an interested shareholder to effect various business combinations with a corporation for a three-year period. The existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, including discouraging attempts that might result in a premium over the market price for the shares of our common stock held by shareholders. A Delaware corporation may "opt out" of Section 203 with an express provision in its original certificate of incorporation or any amendment thereto. Our certificate of incorporation does not contain any such exclusion.

Listing on the Nasdaq Global Market

Our common stock is listed on the Nasdaq Global Market under the symbol "FCEL".

Transfer Agent and Registrar

The transfer agent and registrar for our common stock and preferred stock is American Stock Transfer & Trust Company, New York, New York.

Table of Contents

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, debt securities or other securities registered pursuant to this registration statement and described in this prospectus. We may issue warrants independently or together with other securities that may be attached to or separate from the warrants. We will issue each series of warrants under a separate warrant agreement that will be entered into between us and a bank or trust company, as warrant agent, and will be described in the prospectus supplement relating to the particular issue of warrants. The warrant agent will act solely as our agent in connection with the warrants of such series and will not assume any obligation or relationship of agency for or with holders or beneficial owners of warrants. The following describes certain general terms and provisions of debt warrants or common stock warrants we may offer. We will set forth further terms of the debt warrants, common stock warrants or warrants to purchase other securities and the applicable warrant agreement in the applicable prospectus supplement.

Debt Warrants

The applicable prospectus supplement will describe the terms of any debt warrants, including the following:

the title of the debt warrants;

the offering price for the debt warrants;

the aggregate number of the debt warrants;

the designation and terms of the debt securities purchasable upon exercise of such debt warrants;

if applicable, the designation and terms of the securities with which such debt warrants are issued and the number of such debt warrants issued with each security;

if applicable, the date from and after which such debt warrants and any securities issued therewith will be separately transferable;

the principal amount of debt securities purchasable upon exercise of a debt warrant and the price at which such principal amount of debt securities may be purchased upon exercise;

the date on which the right to exercise such debt warrants shall commence and the date on which such right shall expire;

if applicable, the minimum or maximum amount of such debt warrants which may be exercised at any one time;

whether the debt warrants represented by the debt warrant certificates or debt securities that may be issued upon exercise of the debt warrants will be issued in registered form;

information with respect to book-entry procedures, if any;

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

the currency, currencies or currency units in which the offering price, if any, and the exercise price are payable;

if applicable, a discussion of certain United States federal income tax considerations;

the identity of the warrant agent for the warrants;

the antidilution provisions of such debt warrants, if any;

the redemption or call provisions, if any, applicable to such debt warrant; and

any additional terms of the debt warrants, including terms, procedures and limitations relating to the exchange and exercise of such debt warrants.

Common Stock Warrants

The applicable prospectus supplement will describe the terms of any common stock warrants, including the following:

the title of such warrants;

Table of Contents

the offering price of such warrants;

the aggregate number of such warrants;

the designation and terms of the common stock that is issued and purchasable upon exercise of such warrants;

if applicable, the designation and terms of the securities with which such warrants are issued and the number of such warrants issued with each such security;

if applicable, the date from and after which such warrants and any securities issued therewith will be separately transferable;

the number of shares of common stock that is issued and purchasable upon exercise of the warrants and the price which such shares may be purchased upon exercise;

the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;

if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;

the currency, currencies or currency units in which the offering price, if any, and the exercise price are payable;

if applicable, a discussion of certain United States federal income tax considerations;

the identity of the warrant agent for the warrants; and

the antidilution provisions of the warrants, if any.

Table of Contents

DESCRIPTION OF UNITS

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below. However, no prospectus supplement will fundamentally change the terms that are set forth in this prospectus or offer a security that is not registered and described in this prospectus at the time of its effectiveness.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more shares of common stock and preferred stock, debt and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. We will describe in the applicable prospectus supplement the terms of the series of units, including:

The designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

Any provisions of the governing unit agreement that differ from those described below; and

Any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units. The provisions described in this section, as well as those described under Description of Debt Securities, Description of Capital Stock, and Description of Warrants will apply to each unit and to any debt, shares of capital stock or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent, if applicable, will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

We, any unit agents and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

Table of Contents

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, market sales, block trades or a combination of these methods. We may sell the securities (1) through underwriters or dealers, (2) through agents and/or (3) directly to one or more purchasers. We may distribute the securities from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

in at the market offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;

at prices related to prevailing market prices; or

at negotiated prices.

We may solicit directly offers to purchase the securities being offered by this prospectus. We may also designate agents to solicit offers to purchase the securities from time to time. We will name in a prospectus supplement any agent involved in the offer or sale of our securities.

If we utilize a dealer in the sale of the securities being offered by this prospectus, we will sell the securities to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If underwriters are used in the sale of any the securities, the securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. The securities may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters. Generally, the underwriters' obligations to purchase the securities will be subject to certain conditions precedent. The underwriters will be obligated to purchase all of the securities if they purchase any of the securities.

We may sell the securities through agents from time to time. The applicable prospectus supplement will name any agent involved in the offer or sale of the securities and any commissions paid to them. Generally, any agent will be acting on a best efforts basis for the period of its appointment. In addition, we may enter into derivative, sale or forward sale transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement indicates, in connection with such transaction, the third parties may, pursuant to this prospectus and the applicable prospectus supplement, sell the securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities borrowed from us or others to settle such sales and may use securities received from us or others to settle those sales to close out any related short positions. The third party in such sale transactions will be an underwriter and will be identified in the applicable prospectus supplement (or a post-effective amendment). We may also loan or pledge the securities covered by this prospectus and the applicable prospectus supplement to third parties, who may sell the loaned securities or, in an event of default in the case of a pledge, sell the pledged securities pursuant to this prospectus and the applicable prospectus supplement.

The Underwriters, broker-dealers and agents that participate in the distribution of the securities may be deemed to be underwriters as defined by the Securities Act. Any commissions paid or any discounts or concessions allowed to any such persons, and any profits they receive on resale of the securities, may be deemed to be underwriting discounts and commissions under the Securities Act.

Agents, underwriters, and dealers may be entitled under relevant agreements with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such agents, underwriters and dealers may be required to make in respect thereof. The terms and conditions of any indemnification or contribution will be described in the applicable prospectus supplement.

Underwriters, broker-dealers or agents may receive compensation in the form of commissions, discounts or concessions from us. Underwriters, broker-dealers or agents may also receive compensation from the purchasers of the securities for whom they act as agents or to whom they sell as principals, or both. Compensation as to a particular underwriter, broker-dealer or agent might be in excess of customary commissions and will

Edgar Filing: FUELCELL ENERGY INC - Form 424B5

be in amounts to be negotiated in connection with transactions involving the securities. In effecting sales, broker-dealers engaged by us may arrange for other broker-dealers to participate in the resales. Maximum compensation to any underwriters, dealers or agents will not exceed any applicable NASD limitations.

Underwriters or agents may purchase and sell the securities in the open market. These transactions may include over-allotments, stabilizing transactions, syndicate covering transactions and penalty bids. Over-allotments involve sales in excess of the offering size,

Table of Contents

which creates a short position. Stabilizing transactions consist of bids or purchases for the purpose of preventing or retarding a decline in the market price of the securities and are permitted so long as the stabilizing bids do not exceed a specified maximum. Syndicate covering transactions involve the placing of any bid on behalf of the underwriting syndicate or the effecting of any purchase to reduce a short position created in connection with an offering. The underwriters or agents also may impose a penalty bid, which permits them to reclaim selling concessions allowed to syndicate members or certain dealers if they repurchase the securities in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the securities, which may be higher than the price that might otherwise prevail in the open market. These activities, if begun, may be discontinued at any time. These transactions may be effected on any exchange on which the securities are traded, in the over-the-counter market or otherwise.

Except as indicated in the applicable prospectus supplement, the securities are not expected to be listed on any securities exchange, except for our common stock, which is quoted on the Nasdaq Global Market under the symbol FCEL , and no underwriters will be obligated to make a market in these securities. We cannot predict the activity or liquidity of any trading in these securities.

Table of Contents

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION

FOR SECURITIES ACT LIABILITIES

Our certificate of incorporation provides that none of our directors will be personally liable to us or our shareholders for monetary damages for breach of fiduciary duty as a director, except to the extent such exemption from liability or limitation thereof is not permitted under the Delaware General Corporation Law. Our by-laws provide for indemnification of our officers and directors to the fullest extent permitted by applicable law. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or controlling persons of the Company pursuant to the certificate of incorporation, bylaws or applicable law, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

LEGAL MATTERS

The validity of the securities offered hereby has been passed upon for us by Robinson & Cole LLP, Stamford, Connecticut.

EXPERTS

The consolidated financial statements of FuelCell Energy, Inc. and subsidiaries as of October 31, 2012 and 2011, and for each of the years in the three-year period ended October 31, 2012, and management's assessment of the effectiveness of internal control over financial reporting as of October 31, 2012 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to our securities offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. We have omitted certain parts of the registration statement as permitted by the rules and regulations of the SEC. For further information about us and our securities offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. A copy of the registration statement and the exhibits and schedules filed therewith may be inspected without charge at the public reference room maintained by the SEC, located at 100 F Street, N.E., Washington, D.C. 20549, and copies of all or any part of the registration statement may be obtained from such offices upon the payment of the fees prescribed by the SEC. Please call the SEC at 1-800-SEC-0330 for further information about the public reference room. The SEC also maintains an Internet web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the site is <http://www.sec.gov>.

We are subject to the informational requirements of the Securities Exchange Act of 1934 (the Exchange Act) and, therefore, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and web site of the SEC referred to above. Our common stock is quoted on the Nasdaq Global Market, and you may also inspect and copy our SEC filings at the offices of the National Association of Securities Dealers, Inc. located at 1735 K Street, N.W., Washington, D.C. 20006.

You should rely only on the information provided in this prospectus and the registration statement. We have not authorized anyone else to provide you with different information. Our securities are not being offered in any state where the offer is not permitted. You should assume that the information in this prospectus is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference information that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is an important part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus, while information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference into this registration statement and prospectus the documents listed below, and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d)

of the Exchange Act:

1. Our Annual Report on Form 10-K for the fiscal year ended October 31, 2012;

Table of Contents

2. Our Quarterly Reports on Form 10-Q for the fiscal quarters ended January 31 and April 30, 2013;
3. Our Proxy Statement on Schedule 14A filed with the SEC on February 17, 2013;
4. Our Current Reports on Form 8-K filed November 6, 2012, December 26, 2012, January 7 and 18, 2013, March 13, 2013; April 1, 12 and 18, 2013 and June 7, 20 and 25, 2013,
5. The description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on June 6, 2000, including any amendments or reports filed for the purposes of updating this description.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to FuelCell Energy, Inc., Attention: Corporate Secretary, 3 Great Pasture Road, Danbury, Connecticut 06813, telephone: (203) 825-6000.

Table of Contents

Shares of Common Stock

PROSPECTUS SUPPLEMENT

Sole Book-Running Manager

Stifel

Co-Lead Manager

Cowen and Company

Co-Manager

FBR Capital Markets & Co.

January , 2014

