

FUELCELL ENERGY INC
Form 424B5
July 07, 2016
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Registration No. 333-201427

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell 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 July 6, 2016

Prospectus supplement

(To prospectus dated March 11, 2015)

1,474,000 shares of common stock

Warrants to purchase up to 13,620,341 shares of common stock

We are offering 1,474,000 shares of common stock (common stock), Series A warrants to purchase up to 8,233,277 shares of common stock and Series B warrants to purchase 5,387,064 shares of common stock which have been prefunded (collectively, the warrants) to certain investors. The Series B prefunded warrants are being offered to an investor, whose purchase of shares of common stock in this offering would result in the investor, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock following the consummation of this offering. In lieu of the shares of our common stock that would result in ownership in excess of 4.99%, such investor is purchasing warrants to purchase such excess shares of our common stock. This prospectus also covers the common stock issuable from time to time upon exercise of these warrants. The common stock and warrants will be issued separately. In this offering, J.P. Morgan Securities LLC will act as our placement agent (the Placement Agent). The placement agent is not required to sell any minimum number or dollar amount of common stock or warrants but will use its best efforts to sell the common stock and warrants offered. There is no assurance that any such common stock or warrants will be sold.

Our common stock trade on the NASDAQ Global Market (NASDAQ GM) under the symbol FCEL. On July 6, 2016, the last reported trading price of our common stock on the NASDAQ GM was \$5.83 per share. There is no established public trading market for the warrants, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the warrants on any national securities or other nationally recognized trading system.

Investing in our common stock and warrants involve risks. You should carefully consider each of the factors described under Risk Factors on page S-6 of this prospectus supplement and on page 3 of the accompanying base prospectus before you make an investment in our common stock.

| | Per | |
|--------------|----------|-------|
| | Series B | |
| Per share(1) | Warrant | Total |

| | | | | | |
|---------------------------------|----|--------|----|--------|---------------|
| Public offering price | \$ | 5.83 | \$ | 5.83 | \$ 40,000,003 |
| Placement agent fees | \$ | 0.3498 | \$ | 0.3498 | \$ 2,400,000 |
| Proceeds to us, before expenses | \$ | 5.4802 | \$ | 5.4802 | \$ 36,600,003 |

(1) In addition, investors will receive Series A warrants exercisable for common stock at a per-share exercise price of \$5.83. The per share public offering price and placement agent fees include such amounts related to the Series A warrants. See Description of capital stock and Description of warrants.

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

We expect to deliver the shares of common stock and warrants to investors on or about July 12, 2016, subject to customary closing conditions.

J.P. Morgan

Prospectus Supplement dated July , 2016

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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 \$200,000,000, 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-25 of this prospectus supplement and "Incorporation of Certain Information by Reference" on page S-26 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 placement agent has 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 or warrants 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. and its subsidiaries.

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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 and warrants. 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 and warrants, 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 an integrated fuel cell company with an expanding global presence on three continents. We design, manufacture, sell, install, operate and service ultra-clean, highly efficient stationary fuel cell power plants for distributed power generation. Our power plants provide megawatt-class scalable on-site power and utility grid support, helping customers solve their energy, environmental and business challenges. Our plants are operating in more than 50 locations on three continents and have generated more than 4.5 billion kilowatt hours (kWh) of electricity, which is equivalent to powering more than 438,000 average size U.S. homes for one year. Our growing installed base, units ready for installation 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 sized US homes. Our customer base includes utility companies, municipalities, universities, government entities and businesses in a variety of Industrial and commercial enterprises. Our leading geographic markets are South Korea and the United States and we are pursuing expanding opportunities in Asia and Europe.

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 in populated areas as they are virtually pollutant free, operate quietly and without vibrations, and have only modest space requirements. Locating the power generation near the point of use provides many advantages including less reliance on 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.

We are developing Advanced Technologies which leverage our commercial platform and expertise. Our Direct FuelCell® (DFC®) power plants utilize carbonate fuel cell technology, which is a very versatile type of fuel cell technology. Utilizing our core DFC plants, we have developed and are commercializing both a tri-generation distributed hydrogen configuration that generates electricity, heat and hydrogen for industrial or transportation uses, and a carbon capture application for coal or gas-fired power plants. We also are developing and working to commercialize solid oxide fuel cells (SOFC) for adjacent sub-megawatt applications

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to the markets for our megawatt-class DFC power plants as well as energy storage applications. These applications are complementary to our core products, leverage our existing customer base, project development, sales and service expertise, and are potentially large markets.

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.

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The offering

| | |
|--|--|
| Common stock offered by us | 1,474,000 shares |
| Warrants offered by us | Series A and Series B warrants to purchase up to 13,620,341 shares of our common stock. The Series A warrant will be exercisable during the period commencing six months after the date of original issuance and ending five years thereafter at an exercise price of \$5.83 per share of common stock. The Series B warrant is a prefunded warrant (other than a nominal exercise price) and is exercisable any time up to five years after original issuance. This prospectus also relates to the offering of the shares of common stock issuable upon exercise of the warrants. |
| Common stock to be outstanding after this offering | 33,524,176 shares |
| Use of proceeds | We intend to use the net proceeds from this offering for market and 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-22 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 \$5.83 per share and is based on 32,050,176 shares outstanding as of June 30, 2016. This number of shares excludes the following: | |
| approximately 454,043 shares of our common stock issuable upon conversion of 64,020 shares of our 5% Series B Cumulative Convertible Perpetual Preferred Stock outstanding; | |
| 15,166 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; | |
| 251,653 shares of our common stock issuable upon the exercise of options outstanding at April 30, 2016 under our equity plans; | |
| 166,667 shares of our common stock issuable upon vesting and exercise of warrants issued as part of an equity purchase; | |
| 13,620,341 shares of our common stock issuable upon exercise of our Series A warrants and Series B warrants; | |

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838,707 shares of our common stock available as of April 30, 2016, for future issuance under our equity plans;

62,226 shares of our common stock available as of April 30, 2016, for future issuance under our employee stock purchase plan; and

shares of our common stock and other securities up to an aggregate amount of \$200,000,000 pursuant to a shelf registration statement that we have filed with the SEC, of which approximately \$151,000,000 remains.

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Risk factors

Investing in our common stock and warrants 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 or warrants, 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 transitioned from a research and development company to a commercial products manufacturer and services provider and developer. We have not been profitable since our fiscal year ended October 31, 1997. For the six months ended April 30, 2016, the Company has incurred a net loss to common shareholders of \$28.7 million or \$1.04 per share. 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, reducing the cost of capital 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 products can operate using a variety of fuels, including primarily natural gas and biogas and also methanol, diesel, 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

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investment tax credits (ITC), the incentive programs in South Korea and state renewable portfolio standard programs). The U.S. ITC allows a taxpayer to claim a credit of 30% of qualified expenditures (up to a tax credit limit of \$3,000/kW) for eligible power generation technologies, including fuel cell power plants, which are placed in service on or before December 31, 2016. In December 2015, the United States Congress extended the ITC for five years, beginning on January 1, 2017, and phased it down to 26% in 2020 and 22% in 2021. The intention, as publicly stated by Congressional leaders, was to extend the ITC to all eligible technologies; however, the actual approved language only extended the ITC for solar energy technologies. Senior Congressional leadership, as stated in the Congressional Record on December 18, 2015 and in the media, acknowledged a drafting issue with the legislation and their commitment to correct this oversight in early 2016. The expectation is that a bill will be introduced for vote to include all eligible technologies in the ITC extension, including fuel cells. There can be no assurance regarding the timing of and ultimate passage of a bill to extend the ITC. Other 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 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.

Financial markets worldwide have experienced heightened 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 for 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 cause 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.

Our contracted products may not convert to revenue, and our project pipeline may not convert to contracts, which may have a material adverse effect on our revenue and cash flow.

Some of the orders we accept from customers require certain conditions or contingencies (such as permitting, interconnection or financing) to be satisfied, some of which are outside of our control. The time periods from receipt of a contract to installation may vary widely and are determined by a number of factors, including the terms of the customer contract and the customer's site requirements. This could have an adverse impact on our revenue and cash flow.

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We have signed product sales contracts, engineering, procurement and construction contracts (EPC), power purchase agreements and long-term service agreements with customers subject to contractual, 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.

In certain instances, we have executed power purchase agreements (PPA) with the end-user of the power and site host of the fuel cell power plant. We may then sell the PPA to project investor or retain the project and collect revenue from the sale of power over the term of the PPA, recognizing electricity revenue as power is generated and sold.

We have contracted under long-term service agreements with certain customers to provide service on our products over terms up 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.

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

We provide for a warranty of 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 have 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 three year stack life. These demonstration 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 net rated power output of 350 kW and an expected five year life.

We are still gaining 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,

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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 accrued liabilities for potential damages related to performance problems, however actual results may be different than the assumptions used in our accrual 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 stationary fuel cells (Ballard Power Systems, Inc. and Plug Power), phosphoric acid fuel cells (Doosan Fuel Cells America, formerly ClearEdge Power) and solid oxide fuel cells (LG/Rolls Royce partnership, GE 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 two large and influential stockholders, which may make it difficult for a third party to acquire our common stock.

As of April 30, 2016, POSCO Energy owned approximately 8% of our outstanding common stock and NRG Energy owns approximately 5% 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 and NRG is a purchaser of our products. Therefore, it may be in their interests to exert their substantial influence over matters concerning our overall strategy and technological and commercial development.

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.

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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.

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 owned approximately 8.0% of the outstanding common shares of the Company as of April 30, 2016. POSCO Energy accounted for 67% of the Company's total revenues in fiscal year 2015.

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.

If our goodwill and other intangible assets, long-lived assets, inventory or project assets become impaired, we may be required to record a significant charge to earnings.

We may be required to record a significant charge to earnings in our financial statements should we determine that our goodwill, other intangible assets (i.e., in process research and development (IPR&C)), long-lived

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assets (i.e., property, plant and equipment), inventory, or project assets are impaired. Such a charge might have a significant impact on our financial position and results of operations.

As required by accounting rules, we review our goodwill for impairment at least annually as of July 31 or more frequently if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has goodwill is less than its carrying value. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill might not be recoverable include a significant decline in projections of future cash flows and lower future growth rates in our industry. We review IPR&D for impairment on an annual basis. If the technology has been determined to be abandoned or not recoverable, we would be required to impair the asset. We review inventory and project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We consider a project commercially viable and recoverable if it is anticipated to be sellable for a profit once it is either fully developed or fully constructed. If our projects are not considered commercially viable, we would be required to impair the respective project assets.

Our Advanced Technologies 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. We also contract and partner with private sector companies under certain Advanced Technology contracts to develop strategically important and complementary offerings.

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.

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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.

Eight 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 are classified for Government contracting as a "Large Business," which could adversely affect our rights to own future patents under DOE-funded contracts.

We are classified 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 not 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

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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 our carbonate fuel cell manufacturing intellectual property to POSCO Energy, and we depend on POSCO Energy to also protect our intellectual property rights as licensed. As of April 30, 2016, the Company, excluding its subsidiaries, had 91 current U.S. patents and 111 international patents covering our fuel cell technology. The U.S. patents have an average remaining life of approximately 10 years. Our subsidiary, Versa, has 32 current U.S. patents and 74 international patents covering its SOFC technology, with an average remaining U.S. patent life of approximately eight years. In addition, our subsidiary, FuelCell Energy Solutions, GmbH, has two current U.S. patents and eight international patents for carbonate fuel cell technology licensed from its co-owner, Fraunhofer IKTS.

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.

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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 facilities and 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. We would need to obtain sufficient backlog in order to maintain the use of the expanded capacity. Our ability to manage rapid growth effectively will require us to continue to secure adequate sources of capital and financing, 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.

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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 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 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

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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 and have established 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 that 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.

Although our reporting currency is the U.S. dollar, we conduct our business and incur costs in the local currency of most countries in which we operate. As a result, we are subject to currency translation and transaction risk. Joint ventures or other business arrangements with strategic partners outside of the United States have and are expected in the future to involve investments denominated in the local currency. Changes in exchange rates between foreign currencies and the U.S. dollar could affect our net sales and cost of sales and could result in exchange gains or losses. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations.

We could also expand our business into new and emerging markets, many of which have an uncertain regulatory environment relating to currency policy. Conducting business in such markets could cause our exposure to changes in exchange rates to increase, due to the relatively high volatility associated with emerging market currencies and potentially longer payment terms for our proceeds. Our ability to hedge foreign currency exposure is dependent on our credit profile with financial institutions that are willing and able to do business with us. Deterioration in our credit position or a significant tightening of the credit market conditions could limit our ability to hedge our foreign currency exposure; and therefore, result in exchange gains or losses.

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.

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

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

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

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations (see Critical Accounting Policies and Estimates in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended October 31, 2015). 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 accruals, warranty, performance guarantees, liquidated damages and inventory valuation allowances. 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 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;

changes in the securities analysts' that cover us or failure to issue regularly published reports/

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.

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In the past, following periods of volatility in the market price of their stock, many companies have been the subject 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.

The recent reverse stock split of our shares of common stock may decrease the market trading liquidity of the shares due to the reduced number of shares outstanding or otherwise adversely affect the value of our shares.

On December 3, 2015, we effected a one-for-twelve reverse stock split of our shares of common stock in order to make our common stock more attractive to a broader range of institutional and other investors, as we have been advised that the pre-reverse stock split market price of our common stock potentially affected its acceptability to certain institutional investors, professional investors and other members of the investing public, and to increase the bid price to more than \$1.00 per share to maintain compliance with the listing requirements for our common stock on the NASDAQ Capital Market.

While the reverse stock split has resulted in an increase in the market price of our common stock, the total future market capitalization of our common stock following the reverse stock split may not exceed or remain higher than the market price prior to the reverse stock split. The ongoing effect of the reverse stock split upon the market price of our common stock cannot be predicted with any certainty, and the history of similar reverse stock splits for companies in similar circumstances to ours is varied. The market price of our common stock is dependent on many factors, including our business and financial performance, general market conditions, prospects for future success and other factors detailed from time to time in the reports we file with the SEC. If the market price of our common stock declines, the percentage decline as an absolute number and as a percentage of our overall market capitalization may be greater than would occur in the absence of the reverse stock split. The reverse stock split has also resulted in some shareholders owning odd lots (fewer than 100 shares) that may be more difficult to sell or require greater transaction costs per share to sell. While we believe that a higher stock price may help generate investor interest, there can be no assurance that the reverse stock split will attract institutional investors or investment funds or that such share price will satisfy the investing guidelines of institutional investors or investment funds. As a result, the trading liquidity of our common stock may not improve.

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 provisions of 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.

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 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.

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The provisions of the Series 1 Preferred Shares require that FCE Ltd. make annual 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% 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 between now and July 31, 2020. As an estimate, 15,166 share of our common stock would be 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 prior to July 31, 2020. At 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. If the Company were to use common stock to satisfy the obligations due in 2020 with common stock we would issue approximately 3,379,057 shares of our common stock. The share calculations assume our common stock price is \$5.96 (our common stock closing price on April 30, 2016) and an exchange rate of Cdn. \$0.79776 to U.S. \$1.00 at the time of conversion. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders.

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, after giving effect to the December 3, 2015 reverse stock split, may be converted at any time, at the option of the holder, into 7.0922 shares of our common stock (which is equivalent to an initial conversion price of \$141 per share), plus cash in lieu of fractional shares. Furthermore, the conversion rate applicable to the Series B preferred stock is subject to additional adjustment upon the occurrence of certain events.

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 public offering price of \$5.83 per share in this offering, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$1.32 per share in the net tangible book value of the common stock. See Dilution on page S-23 of this prospectus supplement for a more detailed discussion of the dilution you will incur in this offering.

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Exports of certain of our products are subject to various export control regulations and may require a license or permission from the U.S. Department of State, the U.S. Department of Energy or other agencies.

As an exporter, we must comply with various laws and regulations relating to the export of products, services and technology from the U.S. and other countries having jurisdiction over our operations. We are subject to export control laws and regulations, including the International Traffic in Arms Regulation (ITAR), the Export Administration Regulation (EAR), and the Specially Designated Nationals and Blocked Persons List, which generally prohibit U.S. companies and their intermediaries from exporting certain products, importing materials or supplies, or otherwise doing business with restricted countries, businesses or individuals, and require companies to maintain certain policies and procedures to ensure compliance. We are also subject to the Foreign Corrupt Practices Act which prohibits improper payments to foreign governments and their officials by U.S. and other business entities. Under these laws and regulations, U.S. companies may be held liable for their actions and actions taken by their strategic or local partners or representatives. If we, or our intermediaries, fail to comply with the requirements of these laws and regulations, or similar laws of other countries, governmental authorities in the United States or elsewhere, as applicable, could seek to impose civil and/or criminal penalties, which could damage our reputation and have a material adverse effect on our business, financial condition and results of operations.

We are also subject to registration under the U.S. State Department's Directorate of Defense Trade Controls (DDTC). Due to the nature of certain of our products and technology, we must obtain licenses or authorizations from various U.S. Government agencies such as DDTC or DOE, before we are permitted to sell such products or license such technology outside of the U.S. We can give no assurance that we will continue to be successful in obtaining the necessary licenses or authorizations or that certain sales will not be prevented or delayed. Any significant impairment of our ability to sell products or license technology outside of the U.S. could negatively impact our results of operations, financial condition or liquidity.

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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 such 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;

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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.

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Use of proceeds

We estimate that the net proceeds to us from this offering, based on the sale of 1,474,000 shares of our common stock and Series B warrant at the public offering price of \$5.83 per share, after deducting placement agent fees and estimated offering expenses payable by us, will be approximately \$37.2 million.

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.

Description of warrants

The following is a brief summary of certain terms and conditions of the warrants being offered by this prospectus supplement. We are offering both Series A warrants and prefunded Series B warrants. The following description is subject in all respects to the provisions contained in the warrants.

Form. Both the Series A and Series B warrants will be issued as an individual warrant agreement to the investor.

Exercisability. The Series A warrants are exercisable at any time beginning six months and one day after their original issuance and ending five years thereafter. The Series B warrants are exercisable immediately and at any time up to the date that is five years after their original issuance. The warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice and by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. As an alternative to payment in immediately available funds, the holder may, only if at the time of exercise the registration statement is not effective (or the prospectus contained therein is not available for use) in its sole discretion, elect to exercise the warrants through a net share exercise, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrants. No fractional shares of common stock will be issued in connection with the exercise of warrants. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fair market value of the fractional share, calculated based on the trading price of our common stock.

Exercise Price. The exercise price per whole share of our common stock purchasable upon the exercise of the Series A warrant is \$5.83 per share of common stock and the exercise price of the Series B warrant is \$0.0001 per share of common stock. The exercise price of the warrants is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common stock and also upon any distributions of assets, including cash, stock or other property to our stockholders.

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Exercise Limitations. A holder will not have the right to exercise any portion of the warrants if the holder (together with its affiliates) would beneficially own in excess of 4.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants.

Exchange Listing. We do not plan on applying to list the warrants on the NASDAQ Global Market or any other national securities exchange or automated quotation system.

Fundamental Transactions. In the event of a fundamental transaction, as described in the warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the acquisition of more than 50% of our outstanding common stock, or any person or group becoming the beneficial owner of 50% of the voting power represented by our outstanding common stock, the holders of the warrants will be entitled to receive upon exercise the kind and amount of securities, cash or other property that the holders would have received had they exercised the warrants immediately prior to such fundamental transaction. In addition, in the event of a fundamental transaction, we or any successor entity shall purchase such warrants from the holders for an amount of cash as determined in accordance with the Black-Scholes option pricing model described in the warrants.

No Rights as a Stockholder. Except by virtue of such holder's ownership of shares of our common stock, the holder of a warrant does not have the rights or privileges of a holder of our common stock, including any voting rights, until the holder exercises the warrant.

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 April 30, 2016, was approximately \$4.32 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 sale of 6,861,064 shares of common stock, including the shares of common stock issuable upon exercise of the Series B warrant, in this offering at the public offering price of \$5.83 per share, and after deducting the placement agent fees and our estimated offering expenses, our as adjusted net tangible book value as of April 30, 2016, would have been approximately \$4.51 per share of common stock. This represents an immediate increase in net tangible book value of approximately \$0.19 per share to existing stockholders and an immediate dilution of approximately \$1.32 per share to new investors. The following table illustrates this calculation on a per share basis:

| | |
|--|---------|
| Public Offering price per share | \$ 5.83 |
| Net tangible book value per share as of April 30, 2016 | \$ 4.32 |
| Increase per share attributable to this offering | \$ 0.19 |
| As adjusted net tangible book value per share after this offering | \$ 4.51 |
| Dilution per share to new investors participating in this offering | \$ 1.32 |

The number of shares of common stock outstanding used for existing stockholders in both the table and calculations above is based on 32,050,176 shares outstanding as of June 30, 2016. This calculation is on an as

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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) and exercise of the Series B warrant. This number of shares also excludes:

251,653 shares of our common stock issuable upon the exercise of options outstanding at April 30, 2016 under our equity plans;

166,667 shares of our common stock issuable upon vesting and exercise of warrants issued as part of an equity purchase;

8,233,277 shares of our common stock issuable upon exercise of our Series A warrants;

838,707 shares of our common stock available as of April 30, 2016 for future issuance under our equity plans;

62,226 shares of our common stock available as of April 30, 2016 for future issuance under our employee stock purchase plan; and

shares of our common stock and other securities up to an aggregate amount of \$200,000,000 pursuant to a shelf registration statement that we have filed with the SEC, of which approximately \$151,000,000 remains.

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.

Plan of distribution

J.P. Morgan Securities LLC, referred to as the placement agent, has entered into a placement agency agreement with us in which it has agreed to act as placement agent in connection with the offering. Subject to the terms and conditions contained in the placement agency agreement, the placement agent is using its best efforts to introduce us to certain potential investors who will purchase the common stock and warrants. The placement agent has no obligation to buy any of the common stock and warrants from us nor is the placement agent required to arrange the purchase or sale of any specific number or dollar amount of the common stock and warrants, but has agreed to use its best efforts to arrange for the sale of all of the common stock and warrants.

We have agreed to indemnify the placement agent and certain other persons against certain liabilities under the U.S. Securities Act of 1933, as amended. The placement agent has informed us that it will not engage in overallotment, stabilizing transactions or syndicate covering transactions in connection with this offering.

We have agreed to pay the placement agent a fee equal to 6% of the proceeds of this offering and to reimburse the placement agent for reasonable expenses that it incurs in connection with the offering.

The following table shows the per common share and Series B warrant and total fees we will pay to the placement agent assuming the sale of all of the common stock and warrants offered pursuant to this prospectus supplement:

| | |
|---------------------------------------|--------------|
| Per common share and Series B warrant | \$ 0.3498 |
| Total | \$ 2,400,000 |

We will enter into a securities purchase agreement directly with the investor in connection with this offering, and will only sell to investors who have entered into such securities purchase agreement. Our obligations to issue and sell common stock and warrants to the investors will be subject to the conditions set forth in the securities purchase agreement and warrants, which may be waived by us at our discretion. The investor s

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obligations to purchase common stock and warrants will be subject to the conditions set forth in the securities purchase agreement and warrants as well, which may also be waived.

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We are also offering to certain purchasers whose purchase of shares of common stock in this offering could result in the purchaser, together with its affiliates and certain related parties, beneficially owning more than 4.99% of our outstanding common stock following the consummation of this offering, the opportunity to purchase, in lieu of the shares of our common stock that would result in ownership in excess of 4.99%, prefunded warrants to purchase such excess shares of our common stock. Each prefunded Series B warrant will have an exercise price of \$0.0001. The purchase price for each such Series B warrant would equal the per share public offering price for the common stock in this offering less the \$0.0001 per share exercise price of each such prefunded warrant.

Because there is no minimum offering amount required as a condition to closing, the actual total may be less than the maximum amount set forth above.

We and our officers, directors and certain unitholders have agreed to a 90-day lock-up with respect to common stock and other of our securities that they beneficially own, including securities convertible into common stock and securities that are exchangeable or exercisable for common stock. This means that, subject to certain exceptions, for a period of 90 days following the closing of this offering, we and such persons may not offer, sell, pledge or otherwise dispose of these securities without the prior written consent of the Placement Agent.

This is a brief summary of certain provisions of the placement agency agreement and security purchase agreement and warrants that we will enter into and does not purport to be a complete statement of its terms and conditions. A copy of the placement agency agreement will be filed with the SEC and incorporated by reference into the registration statement of which this prospectus supplement forms a part. See **Where You Can Find More Information** on page S-25.

The placement agent and certain of its affiliates have provided in the past, and may provide from time to time in the future, certain commercial banking, financial advisory, investment banking and other services for us and our affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, the placement agent and certain of its affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

The transfer agent for our common stock 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, New York, New York, and for the placement agent by Morrison & Foerster 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

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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.

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, 2015, filed with the SEC on January 8, 2016;

Our Quarterly Reports on Form 10-Q for the fiscal periods ended January 31, and April 30, 2016, filed with the SEC on March 10 and June 9, 2016, respectively;

Our Current Reports on Form 8-K, filed with the SEC on February 4, March 10, April 8, April 20, April 28, June 9 and June 17, 2016; 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.

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PROSPECTUS

\$200,000,000

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 \$200,000,000.

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 March 11, 2015

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FORWARD-LOOKING STATEMENTS

When used in this prospectus, the words *expects*, *anticipates*, *estimates*, *should*, *will*, *could*, *would*, *may*, *expressions* are intended to identify forward-looking statements. Such statements relate to the development and commercialization by FuelCell Energy, Inc. and its subsidiaries (*FuelCell Energy*, *Company*, *we*, *us* and *our*) of 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, 2014. 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 \$200,000,000. 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, 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.

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FUELCELL ENERGY, INC.

Overview

We are an integrated fuel cell company with an expanding global presence on three continents. We design, manufacture, sell, install, operate and service ultra-clean, highly efficient stationary fuel cell power plants for distributed power generation. Our power plants provide megawatt-class scalable on-site power and utility grid support, helping customers solve their energy, environmental and business challenges. Our plants are operating in more than 50 locations in nine countries on three different continents and have generated more than three billion kilowatt hours (kWh) of electricity, which is equivalent to powering more than 270,000 average size U.S. homes for one year. Our growing installed base and backlog exceeds 300 megawatts (MW).

We provide comprehensive turn-key power generation solutions to our customers, including power plant installations as well as power plant operation and maintenance 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 sized US homes. Our customer base includes utility companies, municipalities, universities, government entities and a variety of industrial and commercial 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 in populated areas as they are virtually pollutant free, operate quietly and without vibrations, and have only minimal 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 Advanced Technologies group is leveraging our commercial platform and expertise to develop new markets for our core technology. Our Direct FuelCell® (DFC®) power plants utilize carbonate fuel cell technology, which is a very versatile type of fuel cell technology. Utilizing our core DFC plants, we have developed and are commercializing both a tri-generation distributed hydrogen configuration that generates electricity, heat and hydrogen for industrial or transportation uses, and carbon capture for coal or gas-fired power plants. We also are developing and working towards commercializing solid oxide fuel cells (SOFC) for adjacent sub-megawatt applications to the markets for our megawatt-class DFC power plants as well as energy storage applications. These applications could potentially establish large markets and are complementary to our core products, leverage our existing customer base, project development, sales and service expertise.

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. Today we develop turn-key distributed generation combined heat and power solutions for our customers and provide comprehensive service for the life of the asset.

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.

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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 research and development company to a commercial products manufacturer, and services provider and developer. 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, reducing the cost of capital 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 products can operate using a variety of fuels, including primarily natural gas and biogas and also methanol, diesel, 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 investment tax credit, the incentive programs in South Korea and state renewable portfolio standard programs). The

U.S. Federal investment tax credit expires on December 31, 2016. Other 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 be found to be unconstitutional, and/or could be reduced or discontinued for other reasons. The reduction, elimination, or expiration of government

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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.

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 for 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.

Our contracted products may not convert to revenue, and our project pipeline may not convert to contracts, which may have a material adverse effect on our revenue and cash flow.

Some of the orders we accept from customers require certain conditions or contingencies (such as permitting, interconnection or financing) to be satisfied, some of which are outside of our control. The time periods from receipt of a contract to installation may vary widely and are determined by a number of factors, including the terms of the customer contract and the customer's site requirements. This could have an adverse impact on our revenue and cash flow.

We have signed product sales contracts, engineering, procurement and construction contracts (EPC) and long-term service agreements with customers subject to contractual, 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.

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

We provide for a warranty of 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 three year stack life. Most of these 250 kW demonstration 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 net 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 stationary fuel cells (Ballard Power Systems, Inc.), phosphoric acid fuel cells (Doosan Fuel Cells America, formerly ClearEdge Power) and solid oxide fuel cells (LG, GE 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.

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

POSCO Energy currently owns approximately 11 percent of our outstanding common stock and NRG Energy owns approximately six 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 and NRG is a purchaser of our products. Therefore, it may be in their interest to exert their 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 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; expectations and total cost of ownership;

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

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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 Energy, which is a related party and owns approximately 11 percent of the outstanding common shares of the Company. POSCO Energy accounted for 69 percent of the Company's total revenues in fiscal year 2014.

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.

If our goodwill and other intangible assets, inventory or project assets become impaired, we may be required to record a significant charge to earnings.

We may be required to record a significant charge to earnings in our financial statements should we determine that our goodwill, other intangible assets (i.e., in process research and development (IPR&D)) or project assets (property, plant and equipment) are impaired. Such a charge might have a significant impact on our financial position and results of operations.

As required by accounting rules, we review our goodwill for impairment at least annually in the fourth quarter or more frequently if facts and circumstances indicate that it is more likely than not that the fair value of a reporting unit that has goodwill is less than its carrying value. Factors that may be considered a change in circumstances indicating that the carrying value of our goodwill might not be recoverable include a significant decline in projections of future cash

flows and lower future growth rates in our industry. We review IPR&D for impairment on a quarterly basis. If the technology has been determined to be abandoned or not recoverable, we would be required to impair the asset. We review inventory and project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We consider a project commercially viable and recoverable if it is anticipated to be sellable for a profit once it is either fully developed or fully constructed. If our projects are not considered commercially viable, we would be required to impair the respective project assets.

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Our Advanced Technologies 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. We also contract and partner with private sector companies under certain Advanced Technology contracts to develop strategically important and complementary offerings.

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.

Eight 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.

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We are classified for Government contracting as a Large Business , which could adversely affect our rights to own future patents under DOE-funded contracts.

We are classified 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 not 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, 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 our carbonate fuel cell manufacturing intellectual

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property to POSCO Energy, and we depend on POSCO Energy to also protect our intellectual property rights as licensed. As of October 31, 2014, the Company, excluding its subsidiaries, had 89 current U.S. patents and 65 international patents covering our fuel cell technology. The U.S. patents have an average remaining life of approximately 10.7 years. Our subsidiary, Versa, has 27 current U.S. patents and 52 international patents covering its SOFC technology, with an average remaining U.S. patent life of approximately 9.4 years. In addition, our subsidiary, FuelCell Energy Solutions, GmbH, has 8 current U.S. patents and 136 international patents for carbonate fuel cell technology licensed from its co-owner, Fraunhofer IKTS.

Some of our intellectual property is not covered by any patent or patent application and includes trade secrets and other knowhow 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

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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 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

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generation to interconnect to utility grids. Many parties are hopeful that this standard will be adopted nationally to help reduce the barriers to deployment of distributed generation such as fuel cells; however this standard may not be adopted nationally thereby limiting the commercial prospects and profitability of our fuel cell systems.

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

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

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

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

Our business exposes us to potential product liability claims that are inherent in products that use hydrogen. Our products utilize fuels such as natural gas and convert these fuels internally to hydrogen that is used by our products to generate electricity. The fuels we use are combustible and may be toxic. In addition, our Direct FuelCell products operate at high temperatures and use corrosive carbonate material, which could expose us to potential liability claims. Although we have incorporated a robust design and redundant safety features in our power plants and have established 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 that 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.

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Although our reporting currency is the U.S. dollar, we conduct our business and incur costs in the local currency of most countries in which we operate. As a result, we are subject to currency translation and transaction risk. Joint ventures or other business arrangements with strategic partners outside of the United States have and are expected in the future to involve investments denominated in the local currency. Changes in exchange rates between foreign currencies and the U.S. dollar could affect our net sales and cost of sales and could result in exchange gains or losses. We cannot accurately predict the impact of future exchange rate fluctuations on our results of operations.

We could also expand our business into new and emerging markets, many of which have an uncertain regulatory environment relating to currency policy. Conducting business in such markets could cause our exposure to changes in exchange rates to increase, due to the relatively high volatility associated with emerging market currencies and potentially longer payment terms for our proceeds. Our ability to hedge foreign currency exposure is dependent on our credit profile with the banks that are willing and able to do business with us. Deterioration in our credit position or a significant tightening of the credit market conditions could limit our ability to hedge our foreign currency exposure; and therefore, result in exchange gains or losses.

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 under the Sarbanes-Oxley Act of 2002. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 requires that we assess, and that our auditors attest to, the design and operating effectiveness of our controls over financial reporting. Our compliance with the annual internal control report requirement for each fiscal year will depend on the effectiveness of our financial reporting and data systems and controls. Inferior internal controls could cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock and our access to capital.

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

The methods, estimates and judgments we use in applying our accounting policies have a significant impact on our results of operations. 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.

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Our stock price has been and could remain volatile.

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

failure to meet 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;

changes in the securities analysts' that cover us or failure to regularly publish reports;

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 subject 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 provisions of 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.

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 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.

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The provisions of the Series 1 Preferred Shares require that FCE Ltd. make annual 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 \$2.02 (our common stock closing price on October 31, 2014) and an exchange rate of U.S. \$1.00 to Cdn. \$1.12 at the time of conversion, we would be required to issue approximately 2,069,405 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.

Exports of certain of our products are subject to various export control regulations and may require a license or permission from the U.S. Department of State, the U.S. Department of Energy or other agencies.

As an exporter, we must comply with various laws and regulations relating to the export of products, services and technology from the U.S. and other countries having jurisdiction over our operations. We are subject to export control laws and regulations, including the International Traffic in Arms Regulation (ITAR), the Export Administration Regulation (EAR), and the Specially Designated Nationals and Blocked Persons List, which generally prohibit U.S. companies and their intermediaries from exporting certain products, importing materials or supplies, or otherwise doing business with restricted countries, businesses or individuals, and require companies to maintain certain policies and procedures to ensure compliance. Under these laws and regulations, U.S. companies may be held liable for their actions and actions taken by their strategic or local partners or representatives. If we, or our intermediaries, fail to comply with the requirements of these laws and regulations, or similar laws of other countries, governmental authorities in the United States or elsewhere, as applicable, could seek to impose civil and/or criminal penalties, which could damage our reputation and have a material adverse effect on our business, financial condition and results of operations.

We are also subject to registration under the U.S. State Department's Directorate of Defense Trade Controls (DDTC). Due to the nature of certain of our products and technology, we must obtain licenses or authorizations from various U.S. Government agencies such as DDTC or DOE, before we are permitted to sell such products or license such technology outside of the U.S. We can give no assurance that we will continue to be successful in obtaining the necessary licenses or authorizations or that certain sales will not be prevented or delayed. Any significant impairment of our ability to sell products or license technology outside of the U.S. could negatively impact our results of operations, financial condition or liquidity.

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.

| | Fiscal Year Ended October 31, | | | | |
|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------|
| | 2014(1) | 2013 (1) | 2012 (1) | 2011 (1) | 2010 (1) |
| Ratio of earnings to fixed charges and preference dividends | N/A | N/A | N/A | N/A | N/A |

(1) For the fiscal years ended October 31, 2014, 2013, 2012, 2011 and 2010, our earnings were insufficient to cover fixed charges. The coverage deficiencies were \$40.8 million, \$37.2 million, \$34.2 million, \$48.3 million and \$55.6 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.

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.

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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.

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 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;

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;

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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. 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.

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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 depositary identified in the prospectus supplement. We will deposit the Global Security with the depositary 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 depositary or any nominee of the depositary unless (1) the depositary has notified us that it is unwilling or unable to continue as depositary or (2) an event of default occurs and continues with respect to the Debt Securities. The depositary will determine how all securities issued in exchange for a Global Security will be registered.

As long as the depositary or its nominee is the registered holder of a Global Security, the depositary 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 depositary 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 depositary or its nominee and persons that hold beneficial interests through the depositary or its nominee may own beneficial interests in a Global Security. The depositary 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 depositary or any such participant.

The policies and procedures of the depositary 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 depositary'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 depositary arrangement with respect to any series of Debt Securities will be described in the applicable prospectus supplement.

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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;

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

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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;

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 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.

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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.

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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.

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.

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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.

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 400,000,000 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 October 31, 2014, 287,160,003 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, FCE FuelCell Energy, Ltd., issued and outstanding and convertible into shares of FuelCell Energy, Inc. common stock.

In addition, as of October 31, 2014, there were outstanding options to purchase 3,028,080 shares of our common stock under our equity incentive plans, 7,540,082 shares of our common stock were available for future issuance under our equity incentive plans, 282,209 shares of our common stock were available for future issuance under our employee stock purchase plan and 5,750,000 shares of our common stock were available for future issuance under warrants. In addition, as of October 31, 2014, we were obligated, if and when the holder exercises its conversion rights, to issue approximately 69,093 shares of our common stock upon conversion of the Series 1 preferred shares. As of October 31, 2014, there were 504 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.

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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, \$0.01 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 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.

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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

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.

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

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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:

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.

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

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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 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.

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As of October 31, 2014, 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 \$3.2 million were paid in cash in each of the years ended October 31, 2014, 2013 and 2012. There were no cumulative unpaid dividends as of October 31, 2014.

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. As of October 31, 2014, the Series B preferred stock had a Liquidation Preference of \$64.0 million.

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Conversion Rights

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

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 as of October 31, 2014) for 20 trading days during any consecutive 30 trading day period, as described in the Certificate of Designation.

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

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

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

Common stock share splits or share combinations;

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

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

Redemption

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

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

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

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

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

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

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

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

We may, at our option, elect to pay the redemption price in cash or, in shares of our common stock valued at a discount of 5 percent from the market price of shares of our common stock, or any combination thereof.

Notwithstanding the foregoing, we may only pay such redemption price in shares of our common stock that are registered under the Securities Act of 1933, as amended (the "Securities Act") and eligible for immediate sale in the public market by non-affiliates of the Company.

Voting Rights

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

So long as any shares of Series B Preferred Stock remain outstanding, we will not, without the consent of the holders of at least two-thirds of the shares of Series B Preferred Stock outstanding at the time (voting separately as a class with all other series of preferred stock, if any, on parity with our Series B Preferred Stock upon which like voting rights have been conferred and are exercisable) issue or increase the authorized amount of any class or series of shares ranking senior to the outstanding shares of the Series B Preferred Stock as to dividends or upon liquidation. In

addition, we will not, subject to certain conditions, amend, alter or repeal provisions of our certificate of incorporation, including the certificate of designation relating to the Series B Preferred Stock, whether by merger, consolidation or otherwise, so as to adversely amend, alter or affect any power, preference or special right of the outstanding shares of Series B Preferred Stock or the holders thereof without the affirmative vote of not less than two-thirds of the issued and outstanding Series B Preferred Stock shares.

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Series 1 Preferred Shares

In connection with our acquisition of Global Thermoelectric 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.

The modified terms of the Series 1 Preferred Shares provides for payments of (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 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.

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.

The Company made its scheduled payments of Cdn. \$1.3 million, Cdn. \$1.3 million and Cdn. \$4.4 million during fiscal 2014, 2013 and 2012, respectively, under the terms of the modified agreement, including the recording of interest expense, which reflects the fair value discount of approximately Cdn. \$2.1 million, Cdn. \$2.0 million and Cdn. \$2.0 million, respectively.

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.

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 US 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.

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.

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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 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 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

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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 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 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.

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;

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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;

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;

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;

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the identity of the warrant agent for the warrants; and

the antidilution provisions of the warrants, if any.

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

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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.

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.

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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 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, 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.

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.

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LEGAL MATTERS

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

EXPERTS

The consolidated financial statements of FuelCell Energy, Inc. and subsidiaries as of October 31, 2014 and 2013, and for each of the years in the three-year period ended October 31, 2014, and management's assessment of the effectiveness of internal control over financial reporting as of October 31, 2014 have been incorporated by reference herein and in the registration statement in reliance upon the report 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.

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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 (excluding any information furnished and not filed with the SEC pursuant to Item 2.02 or 7.01 on any Current Report on Form 8-K, or corresponding information furnished under Item 9.01 or included as an exhibit) until all of the securities offered by this prospectus supplement are sold or until the termination of this offering:

1. Our Annual Report on Form 10-K for the fiscal year ended October 31, 2014;
 2. Our Current Reports on Form 8-K filed on December 17 and 24, 2014; and
 3. 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.

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1,474,000 shares of common stock
Warrants to purchase up to 13,620,341 shares
of common stock

Prospectus supplement
J.P. Morgan Securities LLC

July , 2016