FUELCELL ENERGY INC Form 424B5 June 13, 2018 TABLE OF CONTENTS

Filed Pursuant to Rule 424(b)(5) Registration No. 333-215530 PROSPECTUS SUPPLEMENT (To Prospectus dated February 24, 2017) \$50,000,000

FuelCell Energy, Inc.

Common Stock

We have entered into an At Market Issuance Sales Agreement, which we refer to herein as the Sales Agreement, with B. Riley FBR, Inc. and Oppenheimer & Co. Inc., as sales agents (the "Sales Agents"), relating to the sale of shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the Sales Agreement, under this prospectus supplement and the accompanying prospectus, we may offer and sell shares of our common stock, \$0.0001 par value per share, having an aggregate offering price of up to \$50,000,000 from time to time through the Sales Agents.

Our common stock is quoted on The Nasdaq Global Market under the symbol "FCEL." On June 12, 2018, the last reported sale price for our common stock was \$1.83 per share.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus may be made by any method permitted that is deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended (the "Securities Act").

The Sales Agents are not required to sell any specific number or dollar amount of securities, but will act as our sales agents using commercially reasonable efforts consistent with their respective normal trading and sales practices, on mutually agreed terms between the Sales Agents and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to the Sales Agents for sales of common stock sold pursuant to the Sales Agreement will be an amount equal to 3.0% of the aggregate gross proceeds of any shares of common stock sold under the Sales Agreement. In connection with the sale of the common stock on our behalf, each Sales Agent will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of the Sales Agents will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the Sales Agents with respect to certain civil liabilities, including liabilities under the Securities Act.

Investing in our common stock involves risk. You should read this prospectus supplement and the accompanying prospectus carefully before you make your investment decision. See "Risk Factors" beginning on page S-4 of this prospectus supplement and page 4 of the accompanying prospectus, as well as the documents we file with the Securities and Exchange Commission that are incorporated by reference herein and therein for more information. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is June 13, 2018

B. Riley FBR Oppenheimer & Co.

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We are offering to sell, and are seeking offers to buy, the securities only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus to or by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

About This Prospectus Supplement

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the securities we are offering. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to this offering. This prospectus supplement and the information incorporated by reference in this prospectus supplement also may add to, update and change information contained in, or incorporated by reference into, the accompanying prospectus. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, or in any document incorporated by reference that was filed with the Securities and Exchange Commission, or 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.

The accompanying prospectus is part of a registration statement that we filed with the SEC using a shelf registration process. Under the shelf registration process, from time to time, we may offer and sell any of the securities described in the accompanying prospectus separately or together with other securities described therein.

You should read this prospectus supplement along with 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 distributed to you carefully before you invest. These documents contain important information you should consider when making your investment decision. You should also read and consider the information in the documents to which we have referred you under "Where You Can Find More Information" on page S-33 of this prospectus supplement and on page 34 of the accompanying prospectus and under "Incorporation by Reference" on page 35 of the accompanying prospectus.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus and any related free writing prospectus that we authorized to be distributed to you. We have not authorized anyone to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. Neither we nor anyone acting on our behalf is making an offer to sell these shares of common stock in any jurisdiction where the offer or sale is not permitted, and 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. You should assume that the information contained in this prospectus supplement, the accompanying prospectus, any related free writing prospectus that we have authorized to be delivered to you and the documents incorporated by reference herein and therein 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. 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.

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For purposes of this prospectus supplement and the accompanying prospectus, references to "FuelCell Energy," "we," "our," "our company" and "the Company" are to FuelCell Energy, Inc. and not to our consolidated subsidiaries, unless otherwise indicated or the context otherwise requires.

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Cautionary Statement Regarding Forward-Looking Statements

This prospectus supplement and the accompanying prospectus, the documents incorporated by reference herein and therein and any related free writing prospectuses issued by us may contain forward-looking statements about our financial condition, results of operations, plans, objectives, future performance and business. Statements preceded by, followed by or that include words such as "expects," "anticipates," "estimates," "projects," "intends," "plans," "believes," "pre "should," "will," "could," "may," "forecast," or similar expressions are intended to identify some of the forward-look statements within the meaning of the Private Securities Litigation Reform Act of 1995 and are included, along with this statement, for purposes of complying with the safe harbor provisions of that Act. The realization of matters expressed in forward-looking statements involve risks and uncertainties. Our actual results may differ materially from those contemplated by the forward-looking statements due to, among other factors, the risks and uncertainties described in or incorporated by reference into this prospectus supplement, including under "Risk Factors," and the accompanying prospectus. Any forward-looking statement contained in this prospectus supplement and the accompanying prospectus and the documents incorporated by reference herein and therein speaks only as of the date on which the statement was made, and we undertake no obligation to update publicly or revise any forward-looking statements for any reason, whether as a result of new information, future events or otherwise. New risks emerge from time to time, and we cannot predict all of the risks that may impact our business or the extent to which any particular risk, or combination of risks, may cause actual results to differ materially from those contained in any forward-looking statement.

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Prospectus Supplement Summary

The following summary highlights basic information about FuelCell Energy, Inc. and this offering. Because it is a summary, it does not contain all of the information that may be important to you. You should review this entire prospectus supplement and the accompanying prospectus carefully, including our consolidated financial statements and other information incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision. In addition, please read the "Risk Factors" section beginning on page S-4 of this prospectus supplement and beginning on page 4 of the accompanying prospectus.

Our Business

FuelCell Energy delivers efficient, affordable and clean solutions for the supply, recovery and storage of energy. We design, manufacture, undertake project development of, install, operate and maintain megawatt-scale fuel cell systems, serving utilities and industrial and large municipal power users with solutions that include both utility-scale and on-site power generation, carbon capture, local hydrogen production for transportation and industrial users, and long duration energy storage. Our plants are operating in more than 50 locations on three continents and have generated more than 7.5 million megawatt hours (MWh) of electricity.

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 a reference, one megawatt is adequate to continually power approximately 1,000 average sized U.S. 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 other countries in Asia and Europe.

Our value proposition is to enable economic value with clean and affordable fuel cell power plants that supply power where consumed. Our solutions are easy-to-site in populated areas as they are clean, operate quietly and without vibrations, and have only modest space requirements. Fuel cells use an electrochemical process to convert a fuel source into electricity and heat in a highly efficient process that emits virtually no pollutants as the fuel is not burned, generating power that is almost wholly absent of criteria pollutants such as nitrogen oxides that cause smog, sulfur oxides that contribute to acid rain, and particulate matter that can aggravate asthma. Locating power generation near the point of use reduces reliance on the transmission grid, leading to enhanced energy security and power reliability. Utilities can minimize or even avoid the cost of transmission or other infrastructure by adopting distributed generation, which saves their customers the cost of installing and maintaining transmission and also avoids the losses associated with transmitting electricity over great distances. 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 we believe will lead to wider adoption.

Our products can also be configured for recovery and storage applications. We are developing Advanced Technologies which leverage our commercial platform and expertise. Our SureSource power plants utilize carbonate fuel cell technology, which is a very versatile type of fuel cell technology. Utilizing our core SureSource 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 for adjacent sub-megawatt applications to the markets for our megawatt-class SureSource 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 large markets.

Corporate Information

Our principal 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, or that can be accessed through, our web site is not

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incorporated by reference in this prospectus supplement or in the accompanying prospectus, and you should not consider it to be a part of this prospectus supplement or the accompanying prospectus. Our web site address is included as an inactive textual reference only. S-2

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The Offering

Issuer

FuelCell Energy, Inc.

Common stock offered by us

Shares of our common stock having an aggregate offering price of up to \$50,000,000.

Manner of offering

"At the market offering" that may be made from time to time through our Sales Agents, B. Riley FBR, Inc. and Oppenheimer & Co. Inc. See "Plan of Distribution" on page S-31 of this prospectus supplement.

Use of proceeds

We intend to use the net proceeds from this offering for project development, project financing, working capital support and general corporate purposes. See "Use of Proceeds" on page S-28 for additional information.

Nasdaq Global Market symbol

FCEL

Risk factors

See "Risk Factors" beginning on page S-4 of this prospectus supplement and on page 4 of the accompanying prospectus for a discussion of factors you should consider carefully when making a decision to invest in our common stock.

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Risk Factors

You should carefully consider the following risk factors before making an investment decision. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed below and discussed under the section entitled "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended October 31, 2017, as updated by our subsequent filings under the Securities Exchange Act of 1934, each of which is incorporated by reference in this prospectus supplement in its entirety, together with all of the other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, the documents incorporated by reference herein and therein, and any related free writing prospectus. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. If any such 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.

Risks Related to this Offering

Management will have broad discretion as to the use of the proceeds of this offering, and we may use the proceeds in ways in which you and other stockholders may disagree.

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 may suffer immediate and substantial dilution in the net tangible book value per share of our common stock.

Because the price per share of common stock in this offering may be substantially higher than the net tangible book value per share of common stock, investors in this offering may suffer immediate and substantial dilution in the net tangible book value per share of common stock. The shares in this offering will be sold at market prices which may fluctuate substantially. For purposes of calculating dilution, we have assumed a sale price of \$1.83 per share, which was the last reported sale price of our common stock on The Nasdaq Global Market on June 12, 2018. However, since the shares may be sold at a variety of prices, these dilution numbers are merely an example of potential dilution based on an assumed sales price. Assuming that an aggregate of 27,322,404 shares of our common stock are sold at a price of \$1.83 per share, the last reported sale price of our common stock on The Nasdaq Global Market on June 12, 2018, for aggregate gross proceeds of approximately \$50 million, and after deducting commissions and estimated offering expenses payable by us, you will experience immediate dilution of \$0.10 per share, representing the difference between our as adjusted net tangible book value per share as of April 30, 2018, after giving effect to this offering and the assumed offering price. See the section entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

The actual number of shares we will issue under the Sales Agreement with the Sales Agents, at any one time or in total, is uncertain.

Subject to certain limitations set forth in the Sales Agreement with the Sales Agents and compliance with applicable law, we have the discretion to deliver placement notices to the Sales Agents at any time throughout the term of the Sales Agreement. The number of shares that are sold by the Sales Agents after we deliver a placement notice will fluctuate based on the market price of our common stock during the sales period and limits we set with the Sales Agents.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a S-4

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price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

Risks Related to Our Business

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, services provider and developer. We have not been profitable since our year ended October 31, 1997. We expect to continue to incur net losses and generate negative cash flows until we can produce sufficient revenues and margins 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 and will continue to do so. Our future ability to obtain such financing 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 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.

We have debt outstanding and may incur additional debt in the future, which may adversely affect our financial condition and future financial results.

Our total consolidated indebtedness was \$91.6 million as of April 30, 2018. This includes approximately \$46.4 million of debt at our project finance subsidiaries and \$45.2 million at the corporate level. The majority of our debt is long-term with \$10.1 million due within twelve months as of April 30, 2018. We also have approximately \$40 million of borrowing capacity under a revolving construction and term project financing facility. Our ability to make scheduled payments of the principal and interest or to refinance our indebtedness depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or dilutive. It is also possible that we may incur additional indebtedness in the future in the ordinary course of business. If new debt is added to current debt levels, the risks described above could intensify.

Our debt agreements contain customary representations and warranties, affirmative and negative covenants, and events of default that entitle the lenders to cause our indebtedness under such debt agreements to become immediately due and payable. In addition, our Loan and Security Agreement with Hercules, as amended, contains a financial covenant whereby we are required to maintain an unrestricted cash balance in accounts subject to an account control agreement in favor of Hercules of 75% of the outstanding loan balance plus the amount of accounts payable not paid within 90 days of the invoice date. In connection with the third amendment to the Loan and Security Agreement in March 2018, we drew a term loan advance of \$13.1 million, which resulted in an aggregate amount of outstanding term loan advances of \$25.0 million as of April 30, 2018.

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 power plants can operate on a variety of fuels including natural gas, renewable biogas, directed biogas and propane. If these fuels are not readily available or if their prices increase such that electricity S-5

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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 or 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. 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:

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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 our 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 our Company or our customers for the deployment of our products and services.

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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.

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

Our contracted projects 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), power purchase agreements (PPAs) 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.

We apply the percentage of completion revenue recognition method to certain product sales contracts which are subject to estimates. On a quarterly basis, we perform 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.

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In certain instances, we have executed PPAs with the end-user of the power and site host of the fuel cell power plant. We may then sell the PPA to a 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.

Our ability to proceed with projects under development and complete construction of projects on schedule and within budget may be adversely affected by escalating costs for materials, labor and regulatory compliance, inability to obtain necessary permits, interconnections or other approvals on acceptable terms or on schedule and other factors. If any development project or construction is not completed, is delayed or is subject to cost overruns, we could become obligated to make delay or termination payments or become obligated for other damages under contracts, experience diminished returns or write off all or a portion of our investment in the project. Each of these events could have an adverse effect on our business, financial condition, results of operations and prospects.

Our growing generation portfolio of operating assets exposes us to operational risks and commodity market volatility. We have a growing portfolio of generation assets selling power under PPAs and utility tariff programs that exposes us to operational risks and uncertainties, including, among other things, lost revenues due to prolonged outages, replacement equipment costs, risks associated with facility start-up operations, failures in the availability or acquisition of fuel, the impact of severe adverse weather conditions and natural disasters, risks of property damage or injury from energized equipment, availability of adequate water resources and ability to intake and discharge water, use of new or unproven technology, fuel commodity price risk and fluctuating market prices, and lack of alternative available fuel sources.

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 and we continue to advance the capabilities of the fuel cell stacks and are now producing stacks with a net rated power output of 350 kilowatts and an expected seven year life.

We are still gaining field operating experience with respect to 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 S-7

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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 or after commercialization. Other companies, some of which have substantially greater resources than ours, are currently engaged in the development of products and technologies that are similar to, or may be competitive with, our products and technologies.

Several companies in the U.S. are engaged in fuel cell development, although we are the only domestic company engaged in manufacturing and deployment of stationary carbonate fuel cells. Other emerging fuel cell technologies (and the companies developing them) include small or portable proton-exchange membrane ("PEM") fuel cells (Ballard Power Systems, Plug Power, and increasing activity by numerous automotive companies including Toyota, Hyundai, Honda and GM), stationary phosphoric acid fuel cells (Doosan), stationary solid oxide fuel cells (LG/Rolls Royce partnership and Bloom Energy), and small residential solid oxide fuel cells (Ceres Power Holdings and Ceramic Fuel Cells Ltd.). 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 SureSource power plants in certain applications. Significant competition may also come from gas turbine companies and large scale solar and wind technologies.

We derive significant revenue from contracts awarded through a competitive bidding process involving substantial costs and risks. Due to this competitive pressure, we may be unable to grow revenue and achieve profitability. We expect a significant portion of the business that we will seek in the foreseeable future will be awarded through competitive bidding against other fuel cell technologies and other forms of power generation. The competitive bidding process involves substantial costs and a number of risks, including the significant cost and managerial time to prepare bids and proposals for contracts that may not be awarded to us and our failure to accurately estimate the resources and costs that will be required to fulfill any contract we win. In addition, following a contract award, we may encounter significant expense, delay or contract modifications as a result of our competitors protesting or challenging contracts awarded to us in competitive bidding. In addition, multi-award contracts require that we make sustained post-award efforts to obtain task orders under the contract. We may not be able to obtain task orders or recognize revenue under these multi-award contracts. Our failure to compete effectively in this procurement environment could adversely affect our revenue and/or profitability.

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. S-8

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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;
- customer preference for non-fuel based technologies; 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. 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.

As our relationship with POSCO Energy changes, we may not be able to succeed in our efforts to access the South Korean and Asian markets.

We continue to engage in discussions with POSCO Energy regarding our relationship and the direction of the fuel cell business in the South Korean and Asian markets, as well as POSCO Energy's future with the fuel cell business. We have historically relied on POSCO Energy to develop and grow the South Korean and Asian markets for our products and services. We entered into manufacturing and technology transfer agreements with POSCO Energy in 2007, 2009 and 2012, each of which expires on October 31, 2027. The Cell Technology Transfer Agreement ("CTTA") provides POSCO Energy with the technology rights to manufacture SureSource power plants in South Korea and the right to sell power plants throughout Asia. The CTTA requires POSCO Energy to pay to the Company a 3.0% royalty on POSCO Energy net product sales, as well as a royalty on scheduled fuel cell module replacements under service agreements for modules S-9

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that were built by POSCO Energy and installed at plants in Asia under the terms of our Master Service Agreement with POSCO Energy. In March 2017, we entered into a memorandum of understanding with POSCO Energy to permit us to directly develop the Asian fuel cell business, including the right for us to sell SureSource solutions in South Korea and the broader Asian market. We and POSCO Energy also agreed to undertake to amend the CTTA and other agreements by a target date of September 30, 2017 to reflect our new relationship, although the CTTA and other agreements have not yet been amended. We cannot predict the outcome of our ongoing discussions with POSCO Energy, the future status or scope of our relationship with POSCO Energy, or whether our relationship with POSCO Energy will continue in the future. If we enter into new or amended agreements with POSCO Energy, those agreements may be on terms that are less favorable to us than our existing agreements. If our relationship with POSCO Energy ends, or continues on terms that are less favorable to us, our efforts to access the South Korean and Asian markets, which are complex markets, may not be successful or may be hindered or delayed.

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&D")), long-lived assets (i.e., property, plant and equipment), inventory, or project assets are impaired. Such a charge might have a significant impact on our reported 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 as of July 31 or more frequently if facts and circumstances indicate the fair value is less than the carrying value. 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 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, or generates positive cash flows, 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. We have risks associated with high levels of inventory.

The amount of total inventory as of April 30, 2018 and October 31, 2017 was \$55.3 million and \$74.5 million, respectively, which includes work in process inventory totaling \$35.9 million and \$54.4 million, respectively. We previously reduced our production rate and have been operating at a lower level for a period of time in order to deploy inventory to new projects and mitigate future increases in inventory. There is no guarantee, however, that we will be successful in deploying our existing inventory. In addition, there are risks that our inventory could lose some or all of its value due to technological obsolescence, shifts in market demand or other unexpected changes in industry conditions and circumstances. If we are unable to deploy our current inventory consistent with our business plan, we may be required to sell it at a loss, abandon it or recycle it onto different products. These actions would result in a significant charge to earnings. Such a charge might have a significant impact on our financial position and results of operations.

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 and other U.S. government agencies. These agreements are important to the continued development of our technology and our products. We also contract with private sector companies under certain Advanced Technologies contracts to develop strategically important and complementary offerings.

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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 the right to restrict or take title to certain patents.

Multiple 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.

We are, from time to time depending on our overall employee count, classified for government contracting as a "Large Business", which could adversely affect our rights to own future patents under Department of Energy ("DOE")-funded contracts.

We are, from time to time depending on our overall employee count, 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 the 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 as a large business 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 business relationships that are consistent with, or sufficient to support, our commercialization plans and our growth strategy or that these relationships will be on terms favorable to us. Even if we enter into these types of relationships, we cannot assure you that the business associates with whom we form relationships will focus adequate resources on selling our products or will be successful in selling them. Some of these arrangements have required or will require that we grant exclusive rights to certain companies in defined territories. These exclusive arrangements could result in our

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being unable to enter into other arrangements at a time when the business associate with whom 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/or warrants to purchase our equity, which may have an adverse effect on our stock price. To the extent we enter into partnerships or other business relationships, the failure of these partners or other business associates 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 our products. A supplier's failure to develop and supply components in a timely manner or to supply components that meet our quality, quantity or cost requirements or our 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 SureSource 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 SureSource 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, 2018, we, excluding our subsidiaries, had 92 U.S. patents and 109 patents in other jurisdictions covering our fuel cell technology (in certain cases covering the same technology in multiple jurisdictions), with patents directed to various aspects of our SureSource technology, SOFC technology, PEM fuel cell technology and applications thereof. As of April 30, 2018, we also had 28 patent applications pending in the U.S. and 96 patent applications pending in other jurisdictions. Our U.S. patents will expire between 2018 and 2035, and the current average remaining life of our U.S. patents is approximately 8.9 years. Our subsidiary, Versa Power Systems, Ltd., as of April 30, 2018, had 35 U.S. patents and 75 international patents covering the SOFC technology (in certain cases covering the same technology in multiple jurisdictions), with an average remaining U.S. patent life of approximately 6.5 years. As of April 30, 2018, Versa Power Systems, Ltd. also had four pending U.S. patent applications and 14 patent applications pending in other jurisdictions. In addition, our subsidiary, FuelCell Energy Solutions, GmbH, has license rights to use FuelCell Energy's carbonate fuel cell technology, and, as of April 30, 2018, had two U.S. patents and eight patents outside the U.S. for carbonate fuel cell technology licensed from 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 S-12

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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 that 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 business associates and employees. We cannot assure you that these agreements will not be breached, that we will have adequate remedies for any breach or that such persons or institutions will not assert rights to intellectual property arising out of these relationships. Certain of our intellectual property has been licensed to us on a non-exclusive basis from third parties that may also license such intellectual property to others, including our competitors. If our licensors are found to be infringing third-party patents, we do not know whether we will be able to obtain licenses to use the intellectual property licensed to us on acceptable terms, if at all.

If necessary or desirable, we may seek extensions of existing licenses or further licenses under the patents or other intellectual property rights of others. However, we can give no assurances that we will obtain such extensions or further licenses or that the terms of any offered licenses will be acceptable to us. The failure to obtain a license from a third party for intellectual property that we use at present could cause us to incur substantial liabilities, and to suspend the manufacture or shipment of products or our use of processes requiring the use of that intellectual property. While we are not currently engaged in any 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 our rights or violating their agreements to protect our intellectual property. 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, technical, and other personnel.

Our future success is substantially dependent on the continued services and 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 and to increase production at our manufacturing facility in the future will also depend on our ability to attract and retain additional qualified management, technical, manufacturing and operating 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, technical, manufacturing and operating personnel. Our inability to attract and retain additional qualified management, technical, manufacturing and operating personnel, or the departure of key employees, could materially and adversely affect our development, commercialization and manufacturing plans and, therefore, our business prospects, results of operations and financial condition. In addition, our inability to attract and retain sufficient management, technical, manufacturing and operating personnel to quickly increase production at our manufacturing facility when and if needed to meet increased demand may adversely impact our ability to respond rapidly to any new product, growth or revenue opportunities. 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 S-13

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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, improve our financial and management information systems and 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, emissions, 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 such 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 its business, limiting its 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

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 SureSource 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, 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.

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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 SureSource products operate at high temperatures and use corrosive carbonate material, which could expose us to potential liability claims. Although we have incorporated a robust design and redundant safety features in our power plants, have established comprehensive safety, maintenance, and training programs, 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 and other geopolitical risks, fluctuations in currency exchange rates, longer accounts receivable requirements and collections, greater bonding and security requirements, difficulties in managing international operations, potentially adverse tax consequences, restrictions on repatriation of earnings and the burdens of complying with a wide variety of international laws. Any of these factors could adversely affect our results of operations and financial condition.

We source raw materials and parts for our products on a global basis, which subjects us to a number of potential risks, including the impact of export duties and quotas, trade protection measures imposed by the U.S. and other countries, potential for labor unrest, changing global and regional economic conditions and current and changing regulatory environments. Changes to these factors may have an adverse effect on our ability to source raw materials and parts in line with our current cost structure.

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. 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.

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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.

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

We have entered into strategic relationships with third parties for the 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 relationships allow for termination by the third parties. Termination of any of these relationships 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 third parties, and failure to do so may effectively terminate the relevant relationship.

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

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

We are increasingly dependent on information technology, and disruptions, failures or security breaches of our information technology infrastructure could have a material adverse effect on our operations. In addition, increased information technology security threats and more sophisticated computer crime pose a risk to our systems, networks, products and services.

We rely on information technology networks and systems, including the Internet, to process, transmit and store electronic and financial information and to manage a variety of business processes and activities, including production, manufacturing, financial, logistics, sales, marketing and administrative functions.

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Additionally, we collect and store data that is sensitive to us. Operating these information technology networks and systems and processing and maintaining this data, in a secure manner, are critical to our business operations and strategy. We depend on our information technology infrastructure to communicate internally and externally with employees, customers, suppliers and others. We also use information technology networks and systems to comply with regulatory, legal and tax requirements and to operate our fuel cell power plants. These information technology systems, many of which are managed by third parties or used in connection with shared service centers, may be susceptible to damage, disruptions or shutdowns due to failures during the process of upgrading or replacing software, databases or components thereof, power outages, hardware failures, computer viruses, attacks by computer hackers or other cybersecurity risks, telecommunication failures, user errors, natural disasters, terrorist attacks or other catastrophic events. If any of our significant information technology systems suffer severe damage, disruption or shutdown, and our disaster recovery and business continuity plans do not effectively resolve the issues in a timely manner, our product sales, financial condition and results of operations may be materially and adversely affected, and we could experience delays in reporting our financial results, or our fuel cell power plant operations may be disrupted, exposing us to performance penalties under our contracts with customers.

In addition, information technology security threats — from user error to cybersecurity attacks designed to gain unauthorized access to our systems, networks and data — are increasing in frequency and sophistication. Cybersecurity attacks may range from random attempts to coordinated and targeted attacks, including sophisticated computer crime and advanced persistent threats. These threats pose a risk to the security of our systems and networks and the confidentiality, availability and integrity of our data. Cybersecurity attacks could also include attacks targeting customer data or the security, integrity and/or reliability of the hardware and software installed in our products. We have experienced cybersecurity threats including viruses and phishing attacks. However, to date, no cybersecurity threats have had a material impact on our financial condition, results of operations or liquidity. While we actively manage information technology security risks within our control, there can be no assurance that such actions will be sufficient to mitigate all potential risks to our systems, networks and data. In addition to the direct potential financial risk as we continue to build, own and operate generation assets, other potential consequences of a material cybersecurity attack include reputational damage, litigation with third parties, disruption to systems, unauthorized release of confidential or otherwise protected information, corruption of data, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness, results of operations and financial condition. The amount of insurance coverage we maintain may be inadequate to cover claims or liabilities relating to a cybersecurity attack. 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.

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 SEC.

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;

failure to win contracts through competitive bidding processes;

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the loss of a major customer;

- 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;
- general technological or economic trends; and
- changes in United States or foreign political environment and the passage of laws, including, tax, environmental or other laws, affecting the product development business.

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 the FCE FuelCell Energy, Ltd. Series 1 Preferred Shares, our Series B Preferred Stock and our Series C Preferred Shares 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. Our amended and restated by-laws provide that the Court of Chancery of the State of Delaware is the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a judicial forum deemed favorable by the stockholder for disputes with us or our directors, officers or employees. Our amended and restated by-laws provide that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our amended and restated by-laws, any action to interpret, apply, enforce, or determine the validity of our certificate of incorporation or amended and restated by-laws, or any action asserting a claim against us that is governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that the stockholder finds favorable for disputes against us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees. Alternatively, if a court were to find the choice of forum provision contained in our amended and restated by-laws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition. S-18

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The implementation of our business plan and strategy will require additional capital.

The implementation of our business plan and strategy requires additional capital. If we are unable to raise additional capital in the amounts required, or at all, we will not be able to successfully implement our business plan and strategy. There can be no guarantee that we will be able to raise such additional capital at the times required or in the amounts required for the implementation of our business plan and strategy. In addition, the recent change to a more capital-intensive business model increases the risks of our being able to successfully implement our plans, if we do not raise additional capital in the amounts required. If we are unable to raise additional capital, our business, operations and prospects could be materially and adversely affected.

We will need to raise additional capital, and such capital may not be available on acceptable terms, if at all. If we do raise additional capital utilizing equity, existing stockholders will suffer dilution. If we do not raise additional capital, our business could fail or be materially and adversely affected.

We will need to raise additional funds in debt and equity financings, and these funds may not be available to us when we need them or on acceptable terms, if at all. Such additional financings could be significant. If we raise additional funds through further issuances 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 warrants, you could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of our then-existing capital stock. Any debt financing secured by us in the future could involve restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities. If we cannot raise additional funds when we need them, our business and prospects could fail or be materially and adversely affected. In addition, if additional funds are not secured in the future, we will have to modify, reduce, defer or eliminate parts of our present and anticipated future projects.

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

We may be subject to actions for rescission or damages or other penalties in connection with certain sales of shares of our common stock in the open market.

Between August 2005 and April 2017, we sold shares of our common stock pursuant to a series of "at-the-market" sales plans. The shares sold pursuant to these sales plans represented a portion of the shares registered by us pursuant to shelf registration statements we filed with the SEC during this time period. While we reported the actual shares sold and proceeds, net of fees, of sales made during each fiscal quarter pursuant to the sales plans in our annual and quarterly reports on Forms 10-K and 10-Q, we did not file or deliver prospectus supplements at the time of or prior to making these sales. Accordingly, these sales may not have been in compliance with applicable federal and/or state securities laws, and the purchasers of such shares may have rescission rights or claims for damages. In addition, to the extent that these sales were not in compliance with applicable federal and/or state securities laws, we may be subject to penalties imposed by the SEC and/or state securities agencies. We have reported these sales to the SEC, and in response to our report, the SEC has opened an informal investigation of these sales. If purchasers successfully seek rescission and/or damages, and/or the SEC and/or state securities agencies impose financial penalties on us which are not covered by insurance, we may not have sufficient resources to make the necessary payments, and any such claims, damages or penalties could have a material adverse effect on our stock price, business prospects, results of operations, and financial condition. Although we believe we would have defenses to such claims or actions if brought, we are unable to predict the likelihood of any claims or actions being brought against us, or the amount of any damages or financial penalties which could be sought against us, or the extent to which any such financial exposure would be covered by insurance.

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The rights of the Series 1 Preferred Shares and the 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."), one of our indirect subsidiaries, provide rights to the holder, Enbridge Inc. ("Enbridge"), which could negatively impact us. The provisions of the Series 1 Preferred Shares require that FCE Ltd. make annual 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 terms of the Series 1 Preferred Shares.

We are also required to issue common stock to the holder of the Series 1 Preferred Shares if and when the holder exercises its conversion rights. The number of shares of common stock that we may issue upon conversion could be significant and dilutive to our existing stockholders. For example, assuming the holder of the Series 1 Preferred Shares exercises its conversion rights after July 31, 2020 and assuming our common stock price is \$1.86 (our common stock closing price on April 30, 2018), and an exchange rate of U.S. \$1.00 to Cdn. \$1.28 at the time of conversion, we would be required to issue approximately 1,965,192 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, 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.

We may not be able to make cash payments to redeem the Series C Preferred Shares.

We have the obligation to make bimonthly redemption payments on the Series C Preferred Shares commencing on November 1, 2017. These mandatory redemption payments may be made, at our option, in cash or in shares of our common stock or in a combination of cash and shares of our common stock, except that our right to make payment in shares of common stock is dependent upon our satisfying certain equity conditions. Among other things, these equity conditions include our continued listing on The Nasdaq Global Market or another permitted exchange and our stock maintaining certain minimum average prices and trading volumes during the applicable measurement period. If we cannot satisfy the equity conditions, we will not be able to make our bimonthly mandatory redemption payments in stock, and we would be forced to make such bimonthly payments in cash. We may not have sufficient cash resources at the applicable time to make those cash payments, or to make such cash payments in full. In addition, certain such cash payments may not permitted under the terms of our existing or future indebtedness or may cause us to fail to satisfy financial maintenance covenants.

Further, any failure to pay any amounts due to the holders of the Series C Preferred Shares, as well as certain other "triggering events," including, without limitation, our failure to timely deliver shares, our suspension of trading, our failure to keep reserved for issuance an adequate number of shares of common stock to cover conversion of the Series C Preferred Shares, and breaches of certain covenants that are not timely cured, where a cure period is permitted, would permit the holders of the Series C Preferred Shares to require us to redeem such Series C Preferred Shares in cash at a price equal to the greater of (i) 125% of the stated value of the Series C Preferred Shares being redeemed plus accrued dividends, if any, and (ii) the market value of the number of shares issuable on conversion of the Series C Preferred Shares, valued at the greatest closing sales price during the period from the date immediately before the triggering event through

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the date we make the redemption payment. However, if we are actually delisted from The Nasdaq Global Market, without obtaining a listing on another national securities exchange, it would constitute a "triggering event" under the Certificate of Designations for the Series C Preferred Shares and would also cause a failure of the equity conditions. Thus, if we fail to maintain trading or listing, as applicable, or if for any other reason we are required to repurchase the Series C Preferred Shares in cash prior to maturity, no assurance can be given that we would have the cash or financial resources available to us to make such a payment, and such an acceleration could have a material adverse effect on our business, results of operations and financial condition.

The Series C Preferred Shares rank senior to our common stock with respect to dividends, distributions and payments upon liquidation.

The rights of the holders of the Series C Preferred Shares rank senior to the obligations to our common stockholders. Upon our liquidation, the holders of Series C Preferred Shares are entitled to receive an amount per Series C Preferred Share equal to the greater of (A) the stated value thereof on the date of such payment, plus accrued dividends, if any and (B) the amount per share such holder would receive if such holder converted such Series C Preferred Shares into common stock immediately prior to the date of such payment. Further, the holders of Series C Preferred Shares have the right to participate in any payment of dividends or other distributions made to the holders of common stock to the same extent as if they had converted such Series C Preferred Shares. The existence of such a senior security could have an adverse effect on the value of our common stock.

Holders of the Series C Preferred Shares have rights that may restrict our ability to operate our business. Under the Certificate of Designations establishing the terms of the Series C Preferred Shares, we are subject to certain covenants that limit our ability to create new series of preferred stock, other than series junior to the Series C Preferred Shares with redemption occurring after the maturity date of the Series C Preferred Shares, and our ability to incur certain indebtedness. Such restrictions may have an adverse effect on our ability to operate our business while the Series C Preferred Shares are outstanding.

Our common stockholders may experience significant dilution upon the issuance of common stock upon conversion of or redemption payments under the Series C Preferred Shares.

The issuance of common stock as mandatory redemption payments or upon conversion of some or all of the Series C Preferred Shares will dilute the ownership interests of existing holders of shares of our common stock. As of April 30, 2018, the aggregate outstanding liquidation preference of the Series C Preferred Shares totaled \$14.5 million. If this amount is converted into our common stock at its initial conversion price of \$1.84, we would issue 7,906,522 shares of common stock upon their conversion (without giving effect to any limitation on conversions). This excludes the effect of any common stock we may issue in lieu of paying bimonthly redemption amounts in cash, which may be made at a price lower than the initial conversion price. The initial conversion price of the Series C Preferred Shares is adjustable based on certain events, including in the event of a triggering event and in the event we effect a stock split, combination or similar transaction, to reflect the proportionate (adjusted) trading prices of our common stock before and after the effective date.

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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, as amended ("Certificate of Incorporation"), and Amended and Restated By-laws ("By-laws"). For more detailed information, please see our Certificate of Incorporation and By-laws. Authorized and Outstanding Capital Stock

Our authorized capital stock consists of 225,000,000 shares of common stock, par value \$0.0001 per share, and 250,000 shares of preferred stock, par value \$0.01 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") and 33,500 shares of our preferred stock have been designated as Series C Convertible Preferred Stock ("Series C Preferred Stock" and, such shares, the "Series C Preferred Shares").

As of April 30, 2018, 84,898,762 shares of our common stock were issued and outstanding, 64,020 shares of our Series B Preferred Stock were issued and outstanding, and 14,548 shares of our Series C Preferred Stock were issued and outstanding. No other shares of our preferred stock were issued and outstanding.

As of April 30, 2018, there were 1,000,000 Class A Cumulative Redeemable Exchangeable Preferred Shares (the "Series 1 Preferred Shares") of FCE Ltd. (our Canadian subsidiary) issued and outstanding, which are convertible into shares of our common stock.

As of April 30, 2018, there were outstanding options to purchase 327,890 shares of our common stock under our equity incentive plans, 3,104,838 outstanding restricted stock units granted to employees under our equity incentive plans, 1,571,271 shares of our common stock available for future issuance under our equity incentive plans, and 500,000 shares of our common stock available for future issuance under our employee stock purchase plan. As of April 30, 2018, there were outstanding warrants to purchase up to 19,249,364 shares of our common stock. The exercise prices of these warrants range from \$1.60 to \$5.83 and the expiration dates range from January 2022 to May 2022.

As of April 30, 2018, we were obligated, if and when the holder exercises its conversion rights, to issue approximately 15,166 shares of our common stock upon conversion of the Series 1 Preferred Shares. As of April 30, 2018, we were obligated, if and when the holders exercise their conversion rights, to issue approximately 454,043 shares of our common stock upon conversion of the Series B Preferred Stock. As of April 30, 2018, the aggregate outstanding stated value of the Series C Preferred Shares totaled \$14.5 million. If this amount is converted into our common stock at its initial conversion price of \$1.84, we would issue 7,906,783 shares of common stock upon their conversion (without giving effect to any limitations on conversion).

As of April 30, 2018, there were 188 holders of record of our common stock.

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

Common Stock

The description of our common stock is set forth under the heading "Description of Capital Stock," beginning on page 16 of the accompanying prospectus.

Preferred Stock

Series C Preferred Shares

We issued an aggregate of 33,500 shares of our Series C Preferred Stock, \$0.01 par value and \$1,000 stated value per share, for net proceeds of \$27.9 million on September 8, 2017. Each share of Series C Preferred Stock was sold at a price of \$895.52 for gross proceeds of approximately \$30.0 million. As of April 30, 2018, there were 14,548 shares of Series C Preferred Stock issued and outstanding.

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The Series C Preferred Shares are convertible into shares of common stock, subject to the beneficial ownership limitations provided in the Certificate of Designations for the Series C Preferred Stock (the "Certificate of Designations"), at a conversion price equal to \$1.84 per share of common stock ("Conversion Price"), subject to adjustment as provided in the Certificate of Designations, including adjustments if we sell shares of common stock or equity securities convertible into or exercisable for shares of common stock, at prices below \$1.84 per share, in certain types of transactions, which may potentially include sales of common stock pursuant to the Sales Agreement. In the event of a triggering event, as defined in the Certificate of Designations, the Series C Preferred Shares are convertible into shares of common stock at a conversion price equal to the lower of \$1.84 per share and 85% of the lowest volume weighted average price ("VWAP") of the common stock of the five Trading Days (as such term is defined in the Certificate of Designations) immediately prior to delivery of the applicable conversion notice. The holders will be prohibited from converting Series C Preferred Shares into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would own more than 8.99% of the total number of shares of common stock then issued and outstanding. Each holder has the right to increase its maximum percentage up to 9.99% upon 60 days' notice to us.

On November 1, 2017 and on the sixteenth day and first day of each calendar month thereafter until March 1, 2019, subject to extension in certain circumstances (the "Maturity Date"), inclusive, we will redeem the stated value of Series C Preferred Shares in thirty-three equal installments of \$1.0 million (each bimonthly amount, an "Installment Amount" and the date of each such payment, an "Installment Date"). The holders will have the ability to defer Installment payments, but not beyond the Maturity Date. In addition, during each period commencing on the 11th trading day prior to an Installment Date and prior to the immediately subsequent Installment Date, the holders may elect to accelerate the conversion of Series C Preferred Shares at then applicable installment conversion price, provided that the holders may not elect to effect any such acceleration during such installment period if either (a) in the aggregate, all the accelerations in such installment period exceed the sum of three other Installment Amounts, or (b) the number of Series C Preferred Shares subject to prior accelerations exceeds in the aggregate twelve Installment Amounts. Subject to certain conditions as provided in the Certificate of Designations, we may elect to pay the Installment Amounts in cash or shares of common stock or in a combination of cash and shares of common stock. Installment Amounts paid in shares will be that number of shares of common stock equal to (a) the applicable Installment Amount, to be paid in common stock divided by (b) the least of (i) the then existing conversion price, (ii) 87.5% of the VWAP of the common stock on the Trading Day immediately prior to the applicable Installment Date, and (iii) 87.5% of the arithmetic average of the two lowest VWAPs of the common stock during the ten consecutive Trading Day period ending and including the Trading Day immediately prior to the applicable Installment Date as applicable, provided that we meet standard equity conditions. We shall make such election no later than the eleventh trading day immediately prior to the applicable Installment Date.

If we elect or are required to effect an Installment Amount in whole or in part in cash, the amount paid will be equal to 108% of the applicable Installment Amount.

Each holder of the Series C Preferred Shares shall be entitled to receive dividends (a) if no triggering event, as defined in the Certificate of Designations, has occurred and is continuing when and as declared by the board of directors, in its sole and absolute discretion or (b) if a triggering event has occurred and until such triggering event has been cured, a dividend of 15% per annum based on the holder's outstanding number of Series C Preferred Shares multiplied by the stated value.

In the event of a triggering event, as defined in the Certificate of Designations, the holders of the Series C Preferred Shares can force redemption at a price equal to the greater of (a) the conversion amount to be redeemed multiplied by 125% and (b) the product of (i) the conversion rate with respect to the conversion amount in effect at such time as such holder delivers a triggering event redemption notice multiplied by (ii) the greatest closing sale price of the common stock on any Trading Day during the period commencing on the date immediately preceding such triggering event and ending on the date we make the entire payment required.

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In the event of the liquidation, dissolution, or winding up of our Company, prior to distribution to holders of securities ranking junior to the Series C Preferred Shares, holders of Series C Preferred Shares will be entitled to receive the amount of cash, securities or other property equal to the greater of (a) the stated value thereof on the date of such payment plus accrued dividends, if any and (b) the amount per share such holder would receive if such holder converted such Series C Preferred Shares into common stock immediately prior to the date of such payment. Shares of Series C 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;
- junior to our outstanding Series B Preferred Stock; and
- effectively junior to our subsidiaries' (i) existing and future liabilities and (ii) capital stock held by others.

The holders of the Series C Preferred Shares have no voting rights, except as required by law; provided, however, that any amendment to the Company's Certificate of Incorporation or By-laws or the Certificate of Designations that adversely affects the powers, preferences and rights of the Series C Preferred Shares requires the approval of the holders of a majority of the Series C Preferred Shares then outstanding.

There is no established public trading market for the Series C Preferred Shares, and the Company does not expect a market to develop for the Series C Preferred Shares. The Series C Preferred Shares will not be listed on Nasdaq or any other exchange or trading market. The Company does not plan on making an application to list the Series C Preferred Shares on The Nasdaq Stock Market, any other national securities exchange or any other nationally recognized trading system.

Until September 8, 2018, the holders of the Series C Preferred Shares have the right to receive notice of and to participate in any offering, issuance or sale of equity or equity-equivalent securities by us or our subsidiaries, other than issuances under certain employee benefit plans, upon the conversion of certain options or other convertible securities, or pursuant to certain acquisitions or strategic transactions. Pursuant to such participation rights, the Company must offer to issue and sell to such holders at least 35% of the offered securities. The holders of the Series C Preferred Shares have waived such participation rights with respect to the shares to be sold under the Sales Agreement.

Series 1 Preferred Shares

As of April 30, 2018, there were 1,000,000 Series 1 Preferred Shares of FCE Ltd. issued and outstanding, which are convertible into shares of our common stock. We have guaranteed the obligations of FCE Ltd. under the terms of the Series 1 Preferred Shares.

On March 31, 2011 and April 1, 2011, we entered into agreements with Enbridge to modify the provisions of the Series 1 Preferred Shares of FCE Ltd. Enbridge is the sole holder of the Series 1 Preferred Shares. Consistent with the previous Series 1 Preferred Share agreement, we continue to guarantee the return of principal and dividend obligations of FCE Ltd. to the holders of Series 1 Preferred Shares under the modified agreement.

The terms of the Series 1 Preferred Shares require (a) annual dividend payments of Cdn. \$500,000 and (b) annual return of capital payments of Cdn. \$750,000. These payments commenced on March 31, 2011 and will end on December 31, 2020. Dividends accrue at a 1.25% quarterly rate on the unpaid principal balance, and additional dividends will accrue on the cumulative unpaid dividends (inclusive of the Cdn. \$12.5 million unpaid dividend balance as of the modification date) at a rate of 1.25% per quarter, compounded quarterly. 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 terms of the Series 1 Preferred Shares.

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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% of the volume average price in U.S. dollars at which board lots of the common shares have been traded on Nasdaq during the 20 consecutive trading days preceding the end of the calendar quarter for which such dividend in common shares is to be paid converted into Canadian dollars using the Bank of Canada's noon rate of exchange on the day of determination.

Redemption — The Series 1 Preferred Shares are redeemable by FCE Ltd. for Cdn. \$25.00 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. \$25.00 per share less any amounts paid as a return of capital in respect of such share plus all unpaid dividends and accrued interest. The Company has guaranteed any liquidation obligations of FCE Ltd.

Exchange Rights — A holder of Series 1 Preferred Shares has the right to exchange such shares for fully paid and non-assessable common stock of the Company at the following exchange prices (after giving effect to the December 3, 2015 reverse stock split):

Cdn. \$1,664.52 per share of our common stock after July 31, 2015 until July 31, 2020; and

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

For example, assuming the holder of the Series 1 Preferred Shares exercises its conversion rights after July 31, 2020 and assuming our common stock price is \$1.86 (our common stock closing price on April 30, 2018) and an exchange rate of U.S. \$1.00 to Cdn. \$1.28 (exchange rate on April 30, 2018) at the time of conversion, we would be required to issue approximately 1,965,192 shares of our common stock.

Series B Preferred Stock

We have 105,875 shares of our Series B Preferred Stock authorized for issuance. As of April 30, 2018, there were 64,020 shares of Series B Preferred Stock issued and outstanding. The shares of our Series B Preferred Stock and the shares of our common stock issuable upon conversion of the shares of our Series B Preferred Stock are covered by a registration rights agreement. The following is a summary of certain provisions of our Series B Preferred Stock. Ranking

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

senior to our shares of 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 \$50.00 per share which are payable quarterly in arrears on February 15, May 15, August 15 and November 15. Unpaid accumulated dividends do not bear interest. S-25

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The dividend rate is subject to upward adjustment as set forth in the Certificate of Designation for the Series B Preferred Stock (the "Series B Certificate of Designation") if we fail to pay, or to set apart funds to pay, any quarterly dividend. The dividend rate is also subject to upward adjustment as set forth in the Registration Rights Agreement entered into with the initial purchasers of the Series B Preferred Stock (the "Registration Rights Agreement") if we fail to satisfy our registration obligations with respect to the Series B Preferred Stock (or the underlying common shares) under the Registration Rights Agreement.

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

The dividend on the Series B Preferred Stock may be paid in cash; or at the option of the Company, in shares of our common stock, which will be registered pursuant to a registration statement to allow for the immediate sale of these common shares in the public market. Dividends of \$3.2 million were paid in each of the years ended October 31, 2017, 2016 and 2015. There were no cumulative unpaid dividends as of October 31, 2017 and 2016. Liquidation

The holders of Series B Preferred Stock are entitled to receive, in the event that we are liquidated, dissolved or wound up, whether voluntarily or involuntarily, \$1,000.00 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, 2017 and 2016, the Series B Preferred Stock had a Liquidation Preference of \$64.0 million.

Conversion Rights

Each share of Series B Preferred Stock 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 \$141.00 per share plus cash in lieu of fractional shares. The conversion rate is subject to adjustment upon the occurrence of certain events as described in the Series B Certificate of Designation. The conversion rate is not 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 canceled.

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% of the then prevailing conversion price (\$141.00 per share as of October 31, 2017) for 20 trading days during any consecutive 30 trading day period, as described in the Series B Certificate of Designation.

Redemption

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

We may, at our option, elect to pay the redemption price in cash or, in shares of our common stock valued at a discount of 5% from the market price of shares of our common stock, or any combination thereof. Notwithstanding the foregoing, we may only pay such redemption price in shares of our common stock that are registered under the Securities Act of 1933 and eligible for immediate sale in the public market by non-affiliates of the Company. S-26

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Voting Rights

Holders of Series B Preferred Stock currently have no voting rights; however, holders may receive certain voting rights, as described in the Series B Certificate of Designation, if (a) 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 (b) 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 Series B Certificate of Designation, 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.

Other Participation Rights

Under the terms set forth in the Securities Purchase Agreement, dated as of June 9, 2009, by and between us and POSCO Energy (formerly known as POSCO Power), and the Securities Purchase Agreement, dated as of April 30, 2012, by and between us and POSCO Energy, we granted POSCO Energy the right to receive notice of and to participate in any issuance of new equity securities by us, other than issuances as a dividend or distribution on outstanding securities, upon the conversion or exercise of outstanding securities, to employees, directors or consultants pursuant to certain plans or arrangements, pursuant to the acquisition of another corporation or its assets, or of up to \$5 million in securities to fund obligations to make cash dividends or interest payments on outstanding securities. Pursuant to such participation rights, POSCO Energy has the right to subscribe for and purchase its pro rata portion of such offered securities; provided, that POSCO Energy's participation rights under the April 2012 Securities Purchase Agreement will terminate when POSCO Energy owns less than 898,868 shares of our common stock (as adjusted for the 2015 reverse stock split). POSCO Power has waived such participation rights with respect to the shares to be sold under the Sales Agreement.

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Use Of Proceeds

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$50,000,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We estimate that the net proceeds from the sale of the shares of common stock that we are offering may be up to approximately \$48.4 million after deducting the Sales Agents' commission and estimated offering expenses payable by us. We currently intend to use the net proceeds of this offering for project development, project financing, working capital support and general corporate purposes. Our management will have broad discretion in the allocation of the net proceeds of 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.

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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 net tangible book value as of April 30, 2018 was approximately \$160.6 million, or approximately \$1.72 per outstanding share of common stock. "Net tangible book value" is total assets minus intangible assets, which totaled approximately \$354.0 million at April 30, 2018, and minus total liabilities. "Net tangible book value per share" is net tangible book value divided by the total number of shares outstanding, assuming conversion of preferred shares.

The shares in this offering will be sold at market prices which may fluctuate substantially. For purposes of calculating dilution, we have assumed a sale price of \$1.83 per share, which was the closing price of our stock on June 12, 2018. However, since the shares may be sold at a variety of prices, these dilution numbers are merely an example of potential dilution based on an assumed sales price.

After giving further effect to adjustments relating to the offering and assuming the sale of \$50 million of our common stock at an assumed offering price of \$1.83 per share, the closing price of our common stock as of June 12, 2018, our adjusted net tangible book value on April 30, 2018 would have been approximately \$209.0 million or \$1.73 per share. The further adjustments made to determine adjusted net tangible book value per share are the following:

An increase in total assets to reflect the net proceeds of the offering as described under "Use of Proceeds"; and

The addition of the number of shares offered by this prospectus supplement (based on the last reported sale price of our common stock on The Nasdaq Global Market on June 12, 2018) to the number of shares outstanding.

The following table illustrates the increase in adjusted net tangible book value of \$0.01 per share and the dilution (the difference between the offering price per share and net tangible book value per share) to new investors:

Assumed public offering price per share		\$ 1.83
Adjusted net tangible book value per share as of April 30, 2018	\$ 1.72	
Increase per share attributable to the offering	\$ 0.01	
Adjusted net tangible book value per share as of April 30, 2018, after giving effect to the offering		\$ 1.73
Dilution per share to new investors in the offering		\$ 0.10

The foregoing table is based on 84,898,762 shares outstanding as of April 30, 2018. This calculation is on an "as converted" basis assuming conversion of preferred stock to 8,375,731 shares of common stock. This number of shares also excludes:

327,890 shares of our common stock issuable upon the exercise of options outstanding at April 30, 2018, under our equity plans;

19,249,364 shares of our common stock issuable upon exercise of our outstanding warrants as of April 30, 2018;

1,571,271 shares of our common stock available as of April 30, 2018, for future issuance under our equity plans; and

500,000 shares of our common stock available as of April 30, 2018, for future issuance under our employee stock purchase plan.

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, including any issuance of shares to POSCO Power, POSCO Energy, or the holders of Series C Preferred Shares upon their exercise of their participation rights, the issuance of these securities could result in further dilution to our shareholders. S-29

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Price Range Of Common Stock

The following table shows the high and low sales prices for our common stock as reported on The Nasdaq Global Market for the periods indicated. Our common stock trades on The Nasdaq Global Market under the symbol "FCEL".

High	Low
\$ 12.24	\$ 4.51
8.08	4.56
8.88	5.02
5.67	3.35
\$ 3.40	\$ 1.40
1.98	1.00
1.79	0.80
2.49	1.33
\$ 2.31	1.50
2.11	1.45
1.99	1.71
	\$ 12.24 8.08 8.88 5.67 \$ 3.40 1.98 1.79 2.49 \$ 2.31 2.11

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Plan of Distribution

We have entered into an At Market Issuance Sales Agreement dated June 13, 2018, or the Sales Agreement, with B. Riley FBR, Inc. and Oppenheimer & Co. Inc., or the Sales Agents, under which we may issue and sell our common stock from time to time through the Sales Agents acting as Sales Agents, subject to certain limitations, including the number of shares registered under the registration statement to which the offering relates. The sales, if any, of shares of our common stock made under the Sales Agreement will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act. We may instruct the Sales Agents not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or the Sales Agents may suspend the offering of common stock upon notice and subject to other conditions.

Each time we wish to issue and sell common stock under the Sales Agreement, we will notify a Sales Agent of the number or dollar value of shares proposed to be issued, the dates on which such sales are requested to be made, any limitation on the number of shares which may be sold in any one trading day, any minimum price below which sales may not be made, and other sales parameters as we deem appropriate. Once we have so instructed such Sales Agent, unless such Sales Agent declines to accept the terms of the notice, such Sales Agent has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of the Sales Agents under the Sales Agreement to sell our common stock is subject to a number of conditions that we must meet.

We will pay the Sales Agents commissions for their services in acting as agents in the sale of common stock. The Sales Agents will be entitled to a commission equal to 3.0% of the aggregate gross proceeds from the sale of common stock offered hereby. In addition, we have agreed to reimburse certain expenses of the Sales Agents for fees and disbursements related to their legal counsel in an amount not to exceed \$50,000. We estimate that the total expenses for the offering, excluding compensation payable to the Sales Agents under the terms of the Sales Agreement, will be approximately \$0.1 million.

Settlement for sales of common stock will generally occur on the second trading day following the date on which any sales are made, or on some other date that is agreed upon by us and the Sales Agents in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of the common stock on our behalf, each Sales Agent will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of the Sales Agents will be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to the Sales Agents with respect to certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the Sales Agreement will terminate upon the earlier of (i) the sale of all of our common stock provided for in this prospectus supplement, or (ii) termination of the Sales Agreement as provided therein.

The Sales Agents and their respective affiliates have in the past and may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, the Sales Agents will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

This summary of the material provisions of the Sales Agreement does not purport to be a complete statement of its terms and conditions. A copy of the Sales Agreement was filed as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, or the Exchange Act, with the SEC, and is incorporated by reference into this prospectus supplement. See the section below entitled "Where You Can Find More Information." S-31

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Legal Matters

The validity of the shares of common stock being offered hereby will be passed upon for us by Foley & Lardner LLP, Boston, Massachusetts. Duane Morris LLP, New York, New York, is acting as counsel for the Sales Agents in connection with various legal matters relating to the shares of common stock offered hereby. Experts

The consolidated financial statements of FuelCell Energy, Inc. as of October 31, 2017 and 2016, and for each of the years in the three-year period ended October 31, 2017, and management's assessment of the effectiveness of internal control over financial reporting as of October 31, 2017 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. S-32

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Where You Can Find More Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public through the Internet at the SEC's web site at http://www.sec.gov. 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., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information about its public reference facilities and their copy charges.

The SEC allows us to incorporate by reference the information we file with them. This allows us to disclose important information to you by referencing those filed documents. We have previously filed the following documents with the SEC and are incorporating them by reference into this prospectus supplement (other than information deemed furnished and not filed in accordance with SEC rules, including Items 2.02 and 7.01 of Form 8-K):

Our Annual Report on Form 10-K for the year ended October 31, 2017;

Our Quarterly Reports on Form 10-Q for the quarters ended January 31, 2018 and April 30, 2018;

Our Current Reports on Form 8-K filed on November 1, 2017, December 15, 2017, April 2, 2018, April 6, 2018, and June 13, 2018; and

the description of our common stock included in our registration statement on Form 8-A filed with the SEC on June 6, 2000, including any amendment or reports filed for the purpose of updating such description, and in any other registration statement or report filed by us under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also are incorporating by reference any future filings made by us with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the termination of this offering. The most recent information that we file with the SEC automatically updates and supersedes more dated information.

You can obtain a copy of any documents which are incorporated by reference in this prospectus supplement or the accompanying prospectus, at no cost, by writing or telephoning us at:

FuelCell Energy, Inc.

Attention: Corporate Secretary

3 Great Pasture Road

Danbury, Connecticut 06813

(203) 825-6000

This prospectus supplement is part of a registration statement we filed with the SEC. This prospectus supplement and the accompanying prospectus omit some information contained in the registration statement in accordance with SEC rules and regulations. You should review the information and exhibits in the registration statement for further information about us and our consolidated subsidiaries and the securities we are offering. Statements in this prospectus supplement and in the accompanying prospectus concerning any document we filed as an exhibit to the registration statement or that we otherwise filed with the SEC are not intended to be comprehensive and are qualified by reference to these filings. You should review the complete document to evaluate these statements. S-33

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\$150,000,000 Debt Securities Preferred Stock Common Stock Warrants Units

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

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

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

We will use the net proceeds received from the sale of the securities by the Company for general corporate purposes. Our common stock is quoted on the NASDAQ Global Market under the symbol "FCEL". No public market currently exists for the other securities offered hereby. The applicable prospectus supplement will contain information, where applicable, as to any other listing on any securities exchange of the securities covered by the prospectus supplement. Our principal executive offices are located at 3 Great Pasture Road, Danbury, Connecticut 06813, and our telephone number is (203) 825-6000.

Investing in our securities involves risks that are described in the "Risk Factors" section beginning on page 4 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 February 24, 2017

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FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the information incorporated herein by reference include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). These statements relate to future events and expectations and can be identified by the use of predictive, future-tense or forward-looking terminology, such as "expects", "anticipates", "estimates", "should", "will", "could", "would", and "may". Su statements relate to the development and commercialization by FuelCell Energy, Inc. and its subsidiaries ("FuelCell Energy", "Company", "we", "us" and "our") of fuel cell technology and products and the market for such 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 in Part I, Item 1A "Risk Factors" of our Annual Report on Form 10-K for the year ended October 31, 2016, as well as those discussed elsewhere in this prospectus, any accompanying prospectus supplement or in any document incorporated by reference herein or therein. 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.

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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. By using a shelf registration statement, we are registering an unspecified amount of each class of securities described in this prospectus, and we may sell any combination of the securities described in this prospectus in one or more offerings. In addition, we may use this prospectus and the applicable prospectus supplement in a remarketing or other resale transaction involving the securities after their initial sale. 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. The rules of the SEC allow us to incorporate by reference information into this prospectus and any prospectus supplement. Any information incorporated by reference is considered to be a part of this prospectus and any applicable prospectus supplement, and information that we file later with the SEC will automatically update and supersede this information. See "Where You Can Find More Information." You should read both this prospectus and any applicable prospectus supplement together with additional information described under the heading "Where You Can Find More Information," and any free writing prospectus with respect to an offering filed by us with the SEC. We are responsible for the information contained and incorporated by reference in this prospectus. We have not authorized anyone to give you any other information, and we take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus or any prospectus supplement is accurate as of any date other than the date of the document containing the information. 2

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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).

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 principal 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, or that can be accessed through, our web site is not incorporated by reference in this prospectus or any prospectus supplement, and you should not consider it to be a part of this prospectus or any prospectus supplement. Our web site address is included as an inactive textual reference only.

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RISK FACTORS

Investing in our securities involves risks. Before deciding to purchase any of our securities, you should carefully consider the discussion of risks and uncertainties under the heading "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended October 31, 2016, which is incorporated by reference in this prospectus, and under similar headings in our subsequently filed quarterly reports on Form 10-Q and annual reports on Form 10-K, as well as the other risks and uncertainties described in any applicable prospectus supplement and in the other documents incorporated by reference in this prospectus. See the section entitled "Where You Can Find More Information" in this prospectus. The risks and uncertainties we discuss in the documents incorporated by reference in this prospectus are those we currently believe may materially affect our company. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial also may materially and adversely affect our business, financial condition and results of operations.

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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,				
	2016(1)	2015(1)	2014(1)	2013(1)	2012(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, 2016, 2015, 2014, 2013 and 2012, our earnings were insufficient to cover fixed charges. The coverage deficiencies were \$54.8 million, \$32.6 million, \$40.8 million, \$37.2 million and \$34.2 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, estimate of interest within rental expense, and preferred dividends and (ii) earnings consist of pre-tax income from operations and fixed charges (excluding preferred dividends and capitalized interest) and include the amortization of capitalized interest.

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USE OF PROCEEDS

Except as may be provided in an applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus 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.

The actual application of proceeds we receive from any particular primary offering of securities using this prospectus will be described in the applicable prospectus supplement relating to such offering.

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DESCRIPTION OF DEBT SECURITIES

The following description of the terms of the debt securities sets forth certain general terms and provisions of the debt securities to which any prospectus supplement may relate. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to those debt securities will be described in the prospectus supplement relating to those debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, reference must be made to both the prospectus supplement relating thereto and to the following description. As used in this section, "we," "our" and "us" refer only to FuelCell Energy, Inc. and not to its consolidated subsidiaries.

We may offer and sell debt securities from time to time in one or more series (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." Copies of the forms of each Indenture are incorporated by reference as exhibits to this registration statement.

The following section summarizes certain general terms and provisions of the Debt Securities and Indentures, and should not be considered a complete description of the terms and provisions of each Indenture. Accordingly, the following discussion is qualified in its entirety by reference to the provisions of the Indentures. 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;

- the aggregate principal amount of such Debt Securities and any limit on such aggregate principal amount that may be issued;
- the denomination or denominations in which the Debt Securities will be issuable if other than \$1,000 and integral multiples thereof;

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

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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 and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of the maturity thereof;

- the date or dates, or the method for determining such date of dates, on which the Debt Securities will mature and the amounts to be paid upon maturity of the Debt Securities;
- the rate or rates (which may be fixed or variable), or the method by which such rate or rates shall be determined, at which such Debt Securities will bear interest, if any, the date or dates, or the method for determining such date or dates, from which any such interest will accrue, the dates on which any such interest will be payable, the record dates for such interest payment dates, or the method by which such dates shall be determined, the persons to whom such interest shall be payable, and the basis upon which interest shall be calculated, if other than that of a 360-day year of twelve 30-day months;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the place or places where the principal of, and premium and interest, if any, on such Debt Securities will be payable, where such Debt Securities may be surrendered for registration of transfer or exchange and where notices or demands to or upon us in respect of such Debt Securities may be served;
- the date or dates, if any, after which, and the price or prices at which, and the other terms and conditions upon which such Debt Securities may, pursuant to any optional or mandatory redemption provisions, be redeemed, as a whole or in part, by us;
- Our obligation, if any, to redeem, repay or purchase such Debt Securities pursuant to any sinking fund or analogous provision or at the option of a holder thereof, and the period or periods within which, the price or prices at which and the other terms and conditions upon which such Debt Securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;
- the terms, if any, on which the Debt Securities of such series are convertible into, or exchangeable for, shares of our common stock or other securities, including any mandatory conversion or exchange provisions and any provisions intended to prevent dilution of those conversion or exchange rights;
- whether such Debt Securities will be secured or unsecured and the terms relating thereto;
- the restrictions, if any, on the transfer, sale or other assignment of the Debt Securities;
- if other than U.S. dollars, the currency or currencies in which such Debt Securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, and

the terms and conditions relating thereto;

whether the principal of, or premium and interest, if any, on the Debt Securities of the series is to be payable, at our election or the election of a holder thereof, in a currency or currencies, currency unit or units or composite currency or currencies other than that in which such Debt Securities are denominated or stated to be payable, the period or periods within which, and the terms and conditions upon which, such election may be made, and the time and manner of, and identity of the exchange rate agent with responsibility for, determining the exchange rate between the currency or currencies, currency unit or units or composite currency or currencies in which such Debt Securities are denominated or stated to be payable and the currency or currencies, currency unit or units or composite currency or currencies in which such Debt Securities are to be so payable;

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whether the amount of payments of principal of, or premium and interest, if any, on such Debt Securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on the yield on or trading price of other securities, including United States Treasury securities, or on a currency, currencies, currency unit or units, or composite currency or currencies) and the manner in which such amounts shall be determined;

- any deletions from, modifications of or additions to the Events of Default (as defined in the applicable Indenture) or covenants of the Company with respect to Securities of the series, whether or not such Events of Default or covenants are consistent with the Events of Default or covenants described herein;
- whether and under what circumstances we will pay any additional amounts on such Debt Securities in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem such Debt Securities in lieu of making such payment;
- whether Debt Securities of the series are to be issuable as registered securities, bearer securities (with or without coupons) or both, any restrictions applicable to the offer, sale or delivery of bearer securities and the terms upon which bearer securities of the series may be exchanged for registered securities of the series and vice versa (if permitted by applicable laws and regulations), whether any Debt Securities of the series are to be issuable initially in temporary global form and whether any Debt Securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent Global Security (as defined herein) may exchange such interests for Debt Securities of such series and of like tenor or any authorized form and denomination and the circumstances under which any such exchanges may occur, if other than in the manner provided in the indenture, and, if registered securities of the series are to be issuable as a Global Security, the identity of the depositary for such series;
- the date as of which any bearer securities of the series and any temporary Global Security representing outstanding Debt Securities of the series shall be dated if other than the date of original issuance of the first Security of the series to be issued;
- the person to whom any interest on any registered security of the series shall be payable, if other than the person in whose name that Debt Security (or one or more predecessor securities) is registered at the close of business on the regular record date for such interest, the manner in which, or the person to whom, any interest on any bearer security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary Global Security on an interest payment date will be paid if other than in the manner provided in the applicable Indenture;
- the applicability, if any, of the legal defeasance and covenant defeasance provisions of the Indenture to the Debt Securities of the series;
- whether such Debt Securities will be issued in certificated or book entry form, and if the Debt Securities of such series are to be issuable in definitive form (whether upon original issue or upon exchange of a temporary security of such series) only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form

and/or terms of such certificates, documents or conditions;

- whether the Debt Securities will be listed for trading on an exchange and the identity of such exchange, and whether any underwriters will act as market makers for the Debt Securities; and
- any other terms, preferences, rights or limitations of, or restrictions on, the Debt Securities of such series, including any restrictions on the transfer, sale or other assignment of the Debt Securities.

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

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Original Issue Discount Security, the amount payable to the holder of such Original Issue Discount Security upon such acceleration will be set forth in the prospectus supplement and determined in accordance with the terms of such security and the applicable Indenture, but will be an amount less than the amount payable at the maturity of the principal of such Original Issue Discount Security. The federal income tax considerations with respect to Original Issue Discount Securities will be explained in the prospectus supplement we prepare for the Original Issue Discount Securities.

Conversion and Exchange Rights

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

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

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

Holders of Debt Securities may present them for exchange as provided above or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed, at the office of the transfer agent we designate for the purpose. We will not impose a service charge for any registration of transfer or exchange of Debt Securities, but we may require a payment sufficient to cover any tax or other governmental charge payable in connection with the transfer exchange. We will name the transfer agent in the prospectus supplement. We may designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, but we must maintain a transfer agent in each place of payment for the Debt Securities. If we redeem the Debt Securities, we will not be required to issue, register the transfer of or exchange any Debt Security during a specified period prior to mailing a notice of redemption. We are not required to register the transfer of or exchange any Debt Security selected for redemption, except the unredeemed portion of the Debt Security being redeemed.

Payment and Paying Agents

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

Unless otherwise stated in the prospectus supplement, we will pay principal and any premium or interest on the Debt Securities at the office of our designated paying agent. 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.

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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.

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 sell, assign, transfer, lease, convey or otherwise dispose of all or substantially all of our assets to any person, provided that:

- the surviving company is organized and existing under the laws of the United States, any state thereof or the District of Columbia;
- the surviving company 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 has occurred and is continuing; and
- certain other conditions under the applicable Indenture are met.

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Accordingly, such consolidation, merger or sale, assignment, transfer, lease or conveyance of assets, 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:

- reduce the aggregate principal amount of Debt Securities of any series the holders of which must consent to an amendment, supplement modification or waiver of any provision of the Indentures;
- reduce the rate of or extend the time for payment of interest on any series of Debt Securities;
- reduce the principal of or change the stated maturity of any series of Debt Securities;
- change the date on which any Debt Security of any of series may be subject to redemption, or reduce the premium payable upon the redemption or repurchase thereof;
- make any Debt Security of any series payable in currency other than that stated in the Debt Security;
- modify or change any provision of the Indentures affecting the ranking of the Debt Securities of any series in a manner which adversely affects the holders thereof;
- impair the right of any holder of Debt Securities to institute suit for the enforcement of any payment in or with respect to any such series of Debt Securities; or
- make any change in the amendment and waiver provisions of the Indentures which require each holder's consent.

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

Except in certain limited circumstances, we may set any day as a record date for the purpose of determining the holders of outstanding Debt Securities of any series entitled to give or take any direction, notice, consent, waiver or other action under an Indenture. In certain limited circumstances, the Trustee may set a record date for action by

holders. To be effective, the action must be taken by holders of the requisite principal amount of such Debt Securities within a specified period following the record date.

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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, premium or sinking fund payment, 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 90 days, whether or not, in the case of Subordinated Debt Securities, such payment is prohibited by the Subordinated Indenture;

Failure to comply in any material respect with any agreement or covenants in, or provisions of, the Debt Securities or 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 51% in aggregate principal amount of the outstanding 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 51% in aggregate principal amount of the outstanding Debt Securities of such series outstanding may declare immediately due and payable the unpaid 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. 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, all unpaid principal, premium and accrued interest an 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. 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.

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, (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, and (4) during such 60-day period, the holders of at least a majority in aggregate principal amount of such series of Debt Securities do not give the Trustee a direction inconsistent with the

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request. 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.

Nothing in the Indentures or in any Subordinated Debt Security is intended to impair our obligations, which are absolute and unconditional, to make payments of the principal of, premium, if any, or interest on the Subordinated Debt Securities as and when such Subordinated Debt Securities become due and payable in accordance with their terms.

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 means all indebtedness (present or future) created, incurred, assumed or guaranteed by us (and all renewals, extensions or refundings thereof), unless the instrument under which such indebtedness is created, incurred, assumed or guaranteed provides that such indebtedness is not senior or superior in right of payment to the Subordinated Debt Securities.

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.

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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.

The Trustee or the holders of Subordinated Debt Securities may accelerate the maturity of the Subordinated Debt Securities if an Event of Default has occurred and is continuing, in accordance with the terms of the Indenture, provided that all obligations in respect of Senior Indebtedness then or thereafter due or declared to be due shall first be paid in full before the Trustee of the holders of Subordinated Debt Securities are entitled to receive any payment from us of principal of or interest on the Subordinated Debt Securities.

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.

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DESCRIPTION OF CAPITAL STOCK

The following descriptions set forth certain general terms of our common stock and our preferred stock. While we believe that the following descriptions cover the material terms of our capital stock, the descriptions may not contain all of the information that is important to you. The descriptions set forth below are not complete and are subject to, and qualified in their entirety by, our amended certificate of incorporation (including the Certificate of Designation of Series A Preferred Stock and the Amended Certificate of Designation of 105,875 Shares of 5% Series B Cumulative Convertible Perpetual Preferred Stock incorporated therein, the "Charter"), our amended and restated by-laws ("By-laws"), the Delaware General Corporation Law ("DGCL"), and, for any other series of preferred stock, the certificate of designations relating to such particular series of preferred stock. The particular terms of any series of preferred stock offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to that series of preferred stock will be described in the prospectus supplement relating to that series of preferred stock. Copies of the Charter and the By-laws have been filed with the SEC. You are urged to read the Charter and the By-laws in their entirety.

Authorized and Outstanding Capital Stock

Our authorized capital stock consists of 75,000,000 shares of common stock, par value \$0.0001 per share, and 250,000 shares of preferred stock, par value \$0.01 per share, issuable in one or more series designated by our board of directors, of which 250,000 shares of our preferred stock have been designated as 5% Series B Cumulative Convertible Perpetual Preferred Stock ("Series B preferred stock"). On October 31, 2016, 35,174,424 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 1,000,000 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, 2016, there were outstanding options to purchase 246,923 shares of our common stock under our equity incentive plans, 990,035 shares of our common stock were available for future issuance under our equity incentive plans, 62,226 shares of our common stock were available for future issuance under our employee stock purchase plan and 11,706,000 shares of our common stock were available for future issuance under warrants. In addition, as of October 31, 2016, we were obligated, if and when the holder exercises its conversion rights, to issue approximately 1,042,000 shares of our common stock upon conversion of the Series 1 preferred shares. As of October 31, 2016, Series B Preferred Stock may be converted to 454,043 shares of our common stock. As of December 30, 2016, there were 169 holders of record of our common stock. This does not include the number of persons whose stock is in nominee or "street" name accounts through brokers.

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 (including the election of directors in uncontested elections) must be approved by a majority 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. A plurality voting standard applies in contested director elections (i.e., when the number of nominees for election as directors exceeds the number of directors to be elected at such meeting).

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

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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 following description of the terms of our preferred stock is a summary. You should refer to our Charter and any certificate of amendment to our Charter or certificate of designations filed with the SEC in connection with the offering of our preferred stock for a full description of the terms of the preferred stock. Under our Charter, 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 Charter 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 number of shares to constitute such series and the distinctive designation of such series;
- the dividend rate on the shares of such series and preferences, if any, and the special and relative rights of such shares of such series as to dividend;
- whether or not the shares of such series shall be redeemable, and, if redeemable, the price, terms and manner of redemption;
- the preferences, if any, and the special and relative rights o the shares of such series upon liquidation;
- whether or not the shares of such series shall be subject to the operation of a sinking or purchase fund and, if so, the terms and provisions of such fund;
- whether or not the shares of such series shall be convertible into shares of any other class or of any other series of the same or any other class of stock and, if so, the conversion price or ratio and other conversion rights;
- the conditions under which the shares of such series shall have separate voting rights or no voting rights; and

Such other designations, preferences and relative, participating, optional or other special rights and qualifications, limitations or restrictions of such series of 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.

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

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

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

Dividends

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. Dividends on shares of any cumulative series of preferred stock ("Cumulative Preferred Stock") shall accumulate from and after the day on which such shares are issued, but arrearages in the payment thereof shall not bear interest.

If we have not declared and paid or set apart when due all accrued dividends on each series of our preferred stock through the last preceding dividend date of each such series, we may not declare or pay any dividends on, or make other distributions on, our common stock other than a dividend payable in our common stock. No restriction applies to our repurchase or redemption of our capital stock while there is any arrearage in the payment or dividends or any applicable sinking fund installments.

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 terms and conditions under which all or any part of any series of our preferred stock may be redeemed will be established by our board of directors before we issue such series of preferred stock. All shares of our preferred stock that we redeem, or which have been surrendered for conversion or exchange or for cancellation pursuant to any sinking or purchase fund, will return to the status of authorized but unissued shares.

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Conversion Rights

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

Rights Upon Liquidation

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

Voting Rights

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

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.

As of October 31, 2016, there were 250,000 preferred shares authorized, of which 250,000 shares were designated as Series B preferred shares, and 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

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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. 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 each of the years ended October 31, 2016, 2015 and 2014. There were no cumulative unpaid dividends as of October 31, 2016.

Liquidation

The Series B preferred stock stockholders are entitled to receive, in the event that we are liquidated, dissolved or wound up, whether voluntarily or involuntarily, \$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, 2016, the Series B preferred stock had a Liquidation Preference of \$64.0 million.

Conversion Rights

Each Series B Preferred Stock share 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 \$141.00 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% of the then prevailing conversion price (\$141.00 as of October 31, 2016) 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 20

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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 or 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% or more of the total voting power of all classes of our capital stock then outstanding and normally entitled to vote in the election of directors;

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

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

we consolidate with or merge with or into another person or another person merges with or into us or the sale, assignment, transfer, lease, conveyance or other disposition of all or substantially all of our assets and certain of our subsidiaries, taken as a whole, to another person and, in the case of any such merger or consolidation, our securities that are outstanding immediately prior to such transaction and which represent 100% 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% of the conversion price of the shares of Series B Preferred Stock immediately before the fundamental change or announcement;

at least 90% of the consideration (excluding cash payments for fractional shares) and, in respect of dissenters' appraisal rights, 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

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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% 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 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 Charter, including the certificate of designation relating to the Series B Preferred Stock, whether by merger, consolidation or otherwise, so as to adversely amend, alter or affect any power, preference or special right of the outstanding shares of Series B Preferred Stock or the holders thereof without the affirmative vote of not less than two-thirds of the issued and outstanding Series B Preferred Stock shares.

Series 1 Preferred Shares

In connection with our acquisition of Global 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% 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. 22

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The Company made its scheduled payments of Cdn. \$1.3 million during each of fiscal years 2016, 2015 and 2014, under the terms of the modified agreement, including the recording of interest expense, which reflects the fair value discount of approximately Cdn. \$2.4 million, Cdn. \$2.3 million and Cdn. \$2.1 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% 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.

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\$1,664.52 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% 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% 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 Charter and By-Laws

A number of provisions of our Charter 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, certain advance notice requirements for shareholder proposals and director nominations, 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,

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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 DGCL, 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% 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
- 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% 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% 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 Charter or any amendment thereto. Our Charter does not contain any such exclusion.

Exclusive Forum

The By-laws provide that unless we consent in writing to an alternative forum, a state court located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers or other employees or our stockholders; (iii) any action asserting a claim against us or any of our directors or officers or other employees arising pursuant to any provision of the DGCL or our Charter or the By-laws (as either may be amended from time to time), or (iv) any action asserting a claim against us or any of our directors or other officers or other employees governed by the internal affairs doctrine.

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Limitations of Directors' Liability

Our Charter provides that none of our directors will be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability:

for any breach of the director's duty of loyalty to us or our stockholders;

for acts of omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

under Section 174 of the DGCL; or

for any transaction from which the director derived an improper personal benefit.

The effect of these provisions is to eliminate our rights and the rights of our stockholders (through stockholders' derivatives suits on behalf of us) to recover monetary damages against a director for breach of fiduciary duty as a director (including breaches resulting from grossly negligent behavior), except in the situations described above. These provisions do not limit the liability of directors under federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission based upon a director's breach of his duty of care. Listing on the NASDAO 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.
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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 to purchase other securities and the applicable warrant agreement in the applicable prospectus supplement.

Debt Warrants

If we offer warrants for the purchase of debt securities, a prospectus supplement relating to the warrants being offered will describe the terms of the warrants, the warrant agreement and the warrant certificates, including the following:

the title of the debt warrants;

- the offering price for the debt warrants, if any;
- the aggregate number of the debt warrants;
- the designation and terms of the debt securities purchasable upon exercise of such debt warrants;
- if applicable, the designation and terms of the securities with which such debt warrants are issued and the number of such debt warrants issued with each security;
- if applicable, the date from and after which such debt warrants and any securities issued therewith will be separately transferable;
- the principal amount of debt securities purchasable upon exercise of a debt warrant and the price at which such principal amount of debt securities may be purchased upon exercise;
- the date on which the right to exercise such debt warrants shall commence and the date on which such right shall expire;
- if applicable, the minimum or maximum amount of such debt warrants which may be exercised at any one time;
- whether the debt warrants represented by the debt warrant certificates or debt securities that may be issued upon exercise of the debt warrants will be issued in registered form;

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

- 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.

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Common Stock Warrants

will describe the terms of any common stock warrants, including the following:
the title of such warrants;
• the offering price of such warrants, if any;
• the aggregate number of such warrants;
• the designation and terms of the common stock that is issued and purchasable upon exercise of such warrants;
• if applicable, the designation and terms of the securities with which such warrants are issued and the number of such warrants issued with each such security;
• if applicable, the date from and after which such warrants and any securities issued therewith will be separately transferable;
• the number of shares of common stock that is issued and purchasable upon exercise of the warrants and the price which such shares may be purchased upon exercise;
• the date on which the right to exercise such warrants shall commence and the date on which such right shall expire;
• if applicable, the minimum or maximum amount of such warrants which may be exercised at any one time;
• the currency, currencies or currency units in which the offering price, if any, and the exercise price are payable;
• if applicable, a discussion of certain United States federal income tax considerations;
• the identity of the warrant agent for the warrants;
• the anti-dilution provisions of the warrants, if any;
• redemption or call provisions, if any, applicable to the warrants; and

any other terms of the warrants.

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DESCRIPTION OF UNITS

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

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

General

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

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

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

Any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under "Description of Debt Securities," "Description of Capital Stock," and "Description of Warrants" will apply to each unit and to any debt, shares of capital stock or warrant included in each unit, respectively.

Issuance in Series

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

Enforceability of Rights by Holders of Units

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

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

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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

to this prospectus and the applicable prospectus supplement.

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

If underwriters are used in the sale of any of 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. Depending on the type of offering, the underwriters may be obligated to purchase all of the securities if they purchase any of the securities (other than any securities purchased upon exercise of any over-allotment option). 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

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.

We may offer the common stock covered by this prospectus into an existing trading market on the terms described in the prospectus supplement relating thereto. Underwriters, broker-dealers, and agents who participate in any

at-the-market offerings will be described in the prospectus supplement relating thereto. To the extent that we make sales through one or more underwriters, broker-dealers, or agents in at-the-market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at-the-market offering arrangement between us and the underwriters or agents. If we engage in at-the-market sales pursuant to any such agreement, we will issue and sell our common stock through one or more underwriters, broker-dealers, or agents, which may act on an agency basis or on a principal basis.

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During the term of any such agreement, we may sell our common stock on a daily basis in exchange transactions or otherwise as we agree with the underwriters, broker-dealers, or agents. Such agreement will provide that any common stock sold will be sold at prices related to the then-prevailing market prices for our common stock. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined at this time. Pursuant to the terms of such agreement, we also may agree to sell, and the relevant underwriters, broker-dealers or agents may agree to solicit offers to purchase, blocks of our common stock. The terms of each such agreement will be set forth in more detail in the applicable prospectus supplement.

Agents, underwriters, and broker-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.

Agents, broker-dealers, and underwriters or their affiliates may be customers of, engage in transactions with, or perform services for us in the ordinary course of business. We may also use underwriters or other third parties with whom we have a material relationship. We will describe the nature of any such relationship in the applicable prospectus supplement.

We are subject to the applicable provisions of the Exchange Act and the rules and regulations under the Exchange Act, including Regulation M. This regulation may limit the timing of purchases and sales of any of the shares of common stock offered in this prospectus. The anti-manipulation rules under the Exchange Act may apply to sales of shares of common stock in the market and to our activities.

In certain states, the securities must be sold only through registered or licensed brokers or dealers in order to comply with state securities laws. In addition, in certain states the securities may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

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To the extent required, this prospectus may be amended and/or supplemented from time to time to describe a specific plan of distribution. Instead of selling securities under this prospectus, we may sell the securities offered, including shares of common stock, in compliance with the provisions of Rule 144 or Rule 144A under the Securities Act, if available, or pursuant to other available exemptions from the registration requirements of the Securities Act. 31

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DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Charter 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 DGCL. 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 Charter, By-laws or applicable law, or otherwise, we have been informed 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 Patterson Belknap Webb & Tyler LLP, New York, New York, unless otherwise indicated in the applicable prospectus supplement. If the securities are being distributed in an underwritten offering, the validity of the securities will be passed upon for the underwriters by counsel identified in the related prospectus supplement.

EXPERTS

The consolidated financial statements of FuelCell Energy, Inc. and subsidiaries as of October 31, 2016 and 2015, and for each of the years in the three-year period ended October 31, 2016, and management's assessment of the effectiveness of internal control over financial reporting as of October 31, 2016 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.

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document we file with the SEC at the SEC's Public Reference Room in Washington, D.C. located at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. The SEC maintains an Internet site at http://www.sec.gov which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Our SEC filings are available to the public from the SEC's Internet site.

This prospectus is part of a registration statement that we have filed with the SEC relating to the securities to be offered. This prospectus does not contain all of the information we have included in the registration statement and the accompanying exhibits and schedules in accordance with the rules and regulations of the SEC, and we refer you to the omitted information. The statements this prospectus makes pertaining to the content of any contract, agreement or other document that is an exhibit to the registration statement necessarily are summaries of their material provisions and do not describe all provisions, exceptions and qualifications contained in those contracts, agreements or documents. You should read those contracts, agreements or documents for information that may be important to you. The registration statement, exhibits and schedules are available at the SEC's Public Reference Room or through its Internet site.

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:

1.

Our Annual Report on Form 10-K for the fiscal year ended October 31, 2016, filed with the SEC on January 12, 2017, including the information specifically incorporated by reference into our Annual Report on Form 10-K from our Definitive Proxy Statement on Schedule 14A filed with the SEC on February 17, 2017;

2. Our Current Reports on Form 8-K filed on November 4, 2016, December 1, 2016, December 20, 2016 and January 12, 2017; 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.

You may obtain a copy of any or all of the documents referred to above which have been or will be incorporated by reference in this prospectus (including exhibits specifically incorporated by reference in those documents), as well as a copy of the registration statement of which this prospectus is a part and its exhibits, at no cost to you by writing or telephoning us at the following address:

FuelCell Energy, Inc.

Attention: Corporate Secretary

3 Great Pasture Road

Danbury, Connecticut 06813 Telephone: (203) 825-6000

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\$50,000,000

PROSPECTUS SUPPLEMENT

Common Stock B. Riley FBR Oppenheimer & Co. June 13, 2018