

FUELCELL ENERGY INC

Form S-3

August 10, 2018

TABLE OF CONTENTS

As filed with the Securities and Exchange Commission on August 10, 2018

Registration No. 333-

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

FUELCELL ENERGY, INC.

(Exact name of registrant as specified in its charter)

Delaware	06-0853042
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

3 Great Pasture Road  
Danbury, Connecticut 06810  
(203) 825-6000

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Arthur A. Bottone  
President and Chief Executive Officer  
FuelCell Energy, Inc.

3 Great Pasture Road  
Danbury, Connecticut 06810  
(203) 825-6000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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3 Great Pasture  
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Telephone: (203)  
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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer    Accelerated filer

Non-accelerated filer    Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)(2)	Proposed Maximum Offering Price Per Security(2)	Proposed Maximum Aggregate Offering Price(2)(3)(4)	Amount of Registration Fee(2)
Common Stock, par value \$0.0001 per share				
Preferred Stock, par value \$0.01 per share				
Debt Securities				
Warrants				
Units				
Total			\$ 200,000,000	\$ 24,900

(1)

Includes an indeterminate aggregate principal amount and number of securities of each identified class of securities up to a proposed aggregate offering price of \$200,000,000, which may be offered by the registrant from time to time in unspecified numbers and at indeterminate prices, and as may be issued upon conversion, redemption, repurchase, exchange or exercise of any securities registered hereunder, including any applicable anti-dilution provisions. Securities registered hereunder to be sold by the registrant may be sold either separately or as units comprised of more than one type of security registered hereunder. Pursuant to Rule 416 under the Securities Act of 1933, as amended, the securities being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the securities being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2)

Pursuant to General Instruction II.D of Form S-3, the table lists each of the classes of securities being registered and the aggregate proceeds to be raised but does not specify by each class information as to the amount to be registered, proposed maximum offering price per security, and proposed maximum aggregate offering price.

(3)

If applicable, includes consideration to be received by the registrant for registered securities that are issuable upon exercise, conversion or exchange of other registered securities or that are issued in units.

(4)

The proposed maximum aggregate offering price has been estimated solely for purposes of calculating the registration fee pursuant to Rule 457(o) and General Instruction II. D. of Form S-3.

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

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TABLE OF CONTENTS

The information in this prospectus is not complete and may be changed. The issuer may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 10, 2018  
PROSPECTUS

\$200,000,000  
Common Stock  
Preferred Stock  
Debt Securities  
Warrants  
Units

We may from time to time offer and sell, in one or more series or issuances and on terms that we will determine at the time of the offering, any combination of common stock, preferred stock, debt securities, and warrants, either separately or in units, up to an aggregate amount of \$200,000,000.

This prospectus describes the general manner in which our securities may be offered using this prospectus. We will provide specific terms of the securities, including the offering prices, in one or more supplements to this prospectus. The supplements may also add, update, or change information contained in this prospectus. You should read this prospectus and the prospectus supplement relating to the specific issue of securities carefully before you invest.

We may offer the securities independently or together in any combination for sale directly to purchasers or through underwriters, dealers or agents to be designated at a future date. The supplements to this prospectus will provide the specific terms of the plan of distribution.

Our common stock is listed on the Nasdaq Global Market under the symbol "FCEL." On August 9, 2018, the last reported sale price of the shares of our common stock on the Nasdaq Global Market was \$1.20 per share.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 2 of this prospectus and any other risk factors included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

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

This prospectus may not be used to consummate sales of securities unless, to the extent required by applicable law, it is accompanied by a prospectus supplement.

The date of this prospectus is \_\_\_\_\_, 2018.

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TABLE OF CONTENTS

## Table of Contents

	Page
<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>SUMMARY</u>	<u>1</u>
<u>RISK FACTORS</u>	<u>2</u>
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>19</u>
<u>RATIO OF EARNINGS TO FIXED CHARGES</u>	<u>19</u>
<u>USE OF PROCEEDS</u>	<u>19</u>
<u>SECURITIES WE MAY OFFER</u>	<u>20</u>
<u>DESCRIPTION OF COMMON STOCK</u>	<u>20</u>
<u>DESCRIPTION OF PREFERRED STOCK</u>	<u>21</u>
<u>DESCRIPTION OF DEBT SECURITIES</u>	<u>29</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>39</u>
<u>DESCRIPTION OF UNITS</u>	<u>41</u>
<u>LEGAL OWNERSHIP OF SECURITIES</u>	<u>42</u>
<u>CERTAIN PROVISIONS OF DELAWARE LAW, OUR CHARTER, AND BY-LAWS</u>	<u>45</u>
<u>PLAN OF DISTRIBUTION</u>	<u>47</u>
<u>LEGAL MATTERS</u>	<u>49</u>
<u>EXPERTS</u>	<u>49</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>50</u>
<u>INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE</u>	<u>50</u>

You should rely only on the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or any “free writing prospectus” that we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus, any prospectus supplement, and the documents incorporated by reference herein and therein are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. Neither this prospectus nor any accompanying prospectus supplement shall constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

**TABLE OF CONTENTS**

**ABOUT THIS PROSPECTUS**

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf registration process, we may from time to time sell any combination of the securities registered in one or more offerings. We have provided to you in this prospectus a general description of the securities that we may offer. Each time we sell securities, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in any accompanying prospectus supplement or any “free writing prospectus” that we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that 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 or any prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with any accompanying prospectus supplement and any “free writing prospectus” that we may authorize to be delivered to you, includes all material information relating to the offering of our securities.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus forms a part, includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC’s web site or at the SEC’s offices described below under the heading “Where You Can Find More Information.”

**SUMMARY**

FuelCell Energy, Inc.

FuelCell Energy, Inc., together with its subsidiaries, is a leading integrated fuel cell company with a growing global presence. We design, manufacture, install, operate and service ultra-clean, efficient and reliable stationary fuel cell power plants. Our SureSource power plants generate electricity and usable high quality heat for commercial, industrial, government and utility customers. We have commercialized our stationary carbonate fuel cells and are also pursuing the complementary development of planar solid oxide fuel cells and other fuel cell technologies.

**Corporate Information**

Our principal executive offices are located at 3 Great Pasture Road, Danbury, Connecticut 06810. Our telephone number is (203) 825-6000. We maintain a web site at the following Internet address: [www.fuelcellenergy.com](http://www.fuelcellenergy.com). The information on, or that can be accessed through, our web site is not incorporated by reference in this prospectus, and you should not consider it to be a part of this prospectus. Our web site address is included as an inactive textual reference only.

In this prospectus, unless otherwise stated or the context otherwise requires, references to “FuelCell Energy,” the “Company,” “we,” “us” and “our” and similar references refer to FuelCell Energy, Inc.

TABLE OF CONTENTS

RISK FACTORS

An investment in our securities involves a high degree of risk. You should carefully consider the specific risk factors discussed below and in any accompanying prospectus supplement, as well as the risk factors set forth in the documents and reports filed with the SEC that are incorporated by reference herein and therein, before you make an investment decision pursuant to this prospectus and any accompanying prospectus supplement. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations. 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. As of April 30, 2018, the outstanding loan balance under the Loan and Security Agreement, as amended, was \$26.8 million, including accretion of an end-of-term payment. 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.

## TABLE OF CONTENTS

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 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.



In certain instances, we have executed PPAs with the end-user of the power or 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.

3

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TABLE OF CONTENTS

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 certain of 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, natural disasters, and terrorist attacks, 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 against us, even if unsuccessful, would likely be time consuming, could be costly to defend, and may hurt our reputation in the marketplace. 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.

TABLE OF CONTENTS

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 competitive bidding processes 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.

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:

TABLE OF CONTENTS

- 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 and government policies that affect that market;
- 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 Co., Ltd. (“POSCO Energy”) changes, we may not be able to succeed in our efforts to access the South Korean and Asian markets.

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 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

(“MOU”) 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. In June 2018, POSCO Energy advised us in writing that it was terminating the MOU effective July 15, 2018 and that it intends to exit the fuel cell business during 2018. Pursuant to the terms of the MOU, notwithstanding its termination, we will continue to execute on sales commitments in Asia secured in writing prior to July 15, 2018. We cannot predict the outcome of any 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 or any successor to POSCO

6

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TABLE OF CONTENTS

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. We recently announced that we are beginning to increase our production rate to prior levels. There is no guarantee, however, that we will be successful in deploying our existing inventory or the new inventory generated by increased production. 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 or new 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.

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

TABLE OF CONTENTS

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 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 and would dilute our existing stockholders. 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.

## TABLE OF CONTENTS

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 July 31, 2018, we, excluding our subsidiaries, had 92 U.S. patents and 123 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 July 31, 2018, we also had 35 patent applications pending in the U.S. and 118 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 8.8 years. Our subsidiary, Versa Power Systems, Ltd., as of July 31, 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 6.1 years. As of July 31, 2018, Versa Power Systems, Ltd. also had three pending U.S. patent applications and 16 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 July 31, 2018, had two U.S. patents and seven 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 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.



TABLE OF CONTENTS

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 recently announced an increase in our annual production. We may further rapidly expand our facilities and manufacturing capabilities, accelerate the commercialization of our products and enter a period of rapid growth, which will place a significant strain on our senior management team and our financial and other resources. Any expansion may expose us to increased competition, greater overhead, marketing and support costs and other risks associated with the commercialization of a new product. We would need to obtain sufficient backlog in order to maintain the use of the expanded capacity. Our ability to manage rapid growth effectively will require us to continue to secure adequate sources of capital and financing, improve our operations, 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.

TABLE OF CONTENTS

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 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.

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.

## TABLE OF CONTENTS

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.

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.

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

**TABLE OF CONTENTS**

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. 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



## TABLE OF CONTENTS

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 attacks that have resulted in unauthorized parties gaining access to our information technology systems and networks, and we could in the future experience similar attacks. However, to date, no cybersecurity attack has 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 changes to our accounting policies or the 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;
- 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;

TABLE OF CONTENTS

- 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.



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.

15

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TABLE OF CONTENTS

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.

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.

TABLE OF CONTENTS

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 \$1.30 (our common stock closing price on July 31, 2018), and an exchange rate of U.S. \$1.00 to Cdn. \$1.30 (exchange rate on July 31, 2018) at the time of conversion, we would be required to issue approximately 2,762,104 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 be 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 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.

TABLE OF CONTENTS

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 July 31, 2018, the aggregate outstanding liquidation preference of the Series C Preferred Shares totaled \$11.7 million. If this amount is converted into our common stock at its initial conversion price of \$1.84, we would issue 6,348,401 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.

**TABLE OF CONTENTS**

**SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus, any prospectus supplement, 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,” “predicts,” “should,” “would,” “may,” “forecast,” or similar expressions are intended to identify some of the forward-looking 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 involves 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, including under “Risk Factors.” Any forward-looking statement contained in this prospectus and any prospectus supplement 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.

**RATIO OF EARNINGS TO FIXED CHARGES**

Our ratio of earnings to fixed charges for each of the five most recently completed fiscal years and any required interim periods will be specified in a prospectus supplement or in a document that we file with the SEC and incorporate by reference pertaining to the issuance, if any, by us of debt securities in the future.

**USE OF PROCEEDS**

Unless otherwise provided in the applicable prospectus supplement, we currently intend to use the net proceeds from the sale of the securities from offerings under this prospectus 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 these offerings for any purpose, and investors will be relying on the judgment of our management with regard to the use of these net proceeds. We may set forth additional information on the use of proceeds from the sale of securities that we offer under this prospectus in a prospectus supplement relating to the specific offering. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. We may invest the net proceeds temporarily until we use them for their stated purpose.

## TABLE OF CONTENTS

### SECURITIES WE MAY OFFER

The following is a general description of the terms and provisions of the securities we may offer and sell under this prospectus. These summaries are not meant to be complete. This prospectus and the applicable prospectus supplement will contain the material terms and conditions of each security. Any prospectus supplement may add, update or change the terms and conditions of the securities as described in this prospectus.

### DESCRIPTION OF COMMON STOCK

The following description sets forth certain general terms of our common stock. While we believe that the following description covers the material terms of our common stock, the description may not contain all of the information that is important to you. The description set forth below is not complete and is subject to, and qualified in its entirety by, our certificate of incorporation, as amended (the “Charter”), our amended and restated by-laws (“By-laws”) and the Delaware General Corporation Law (“DGCL”). 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 Common Stock

Under the Charter, we are authorized to issue 225,000,000 shares of common stock, par value \$0.0001 per share. On July 31, 2018, 92,280,169 shares of our common stock were issued and outstanding.

In addition, as of July 31, 2018, there were outstanding options to purchase 323,533 shares of our common stock under our equity incentive plans, 3,281,744 shares of our common stock were available upon vesting of outstanding restricted stock units issued under our equity incentive plans, 1,394,365 shares of our common stock were available for future issuance under our equity incentive plans, 500,000 shares of our common stock were available for future issuance under our employee stock purchase plan and 19,249,364 shares of our common stock were available for future issuance under warrants. As of July 31, 2018, there were 187 holders of record of our common stock. This does not include the number of persons whose stock is held in nominee or “street” name accounts through brokers.

#### 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 stockholders (including the election of directors in uncontested elections) must be approved by a majority of the votes properly cast on the matter at a meeting at which a quorum is present, 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.

#### Certain 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, 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

## TABLE OF CONTENTS

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).

### 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 (in their capacity as 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 our common stock.

### Listing on the Nasdaq Global Market

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

### Transfer Agent and Registrar

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

## DESCRIPTION OF PREFERRED STOCK

The following description sets forth certain general terms of our preferred stock. While we believe that the following description covers the material terms of our preferred stock, the description may not contain all of the information that is important to you. The description set forth below is not complete and is subject to, and qualified in its entirety by, the Charter (including the Certificates of Designation relating to our Series B Preferred Stock and Series C Preferred Stock (in each case as defined below)), the By-laws, the 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 (including Certificates of Designation) and the By-laws have been filed with the SEC. You are urged to read the Charter (including Certificates of Designation) and the By-laws in their entirety.

### Authorized and Outstanding Preferred Stock

Under the Charter, we are authorized to issue 250,000 shares of preferred stock, par value \$0.01 per share, 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 July 31, 2018, 64,020 shares of our Series B Preferred Stock and 11,681 shares of our Series C Preferred Stock were issued and outstanding. No other shares of our preferred stock are issued and outstanding. As of July 31, 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 July 31, 2018, we were obligated, if and when the holder of the Series 1 Preferred Shares exercises its conversion rights, to issue approximately 15,166 shares of our common stock upon conversion of the Series 1 Preferred Shares.

As of July 31, 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 July 31, 2018, the aggregate liquidation preference of the Series C Preferred Shares totaled \$11.7 million. If this amount is converted into our common stock at the initial conversion price of \$1.84, we would issue 6,348,401 shares of common stock upon conversion (without giving effect to any limitations on conversion).

TABLE OF CONTENTS

## 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 July 31, 2018, there were 11,681 shares of Series C Preferred Stock issued and outstanding.

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 “Series C 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 Series C 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 our At Market Issuance Sales Agreement with B. Riley FBR, Inc. and Oppenheimer & Co. Inc. In the event of a triggering event, as defined in the Series C 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 Series C 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 Series C 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 pay 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 Series C 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.



TABLE OF CONTENTS

In the event of a triggering event, as defined in the Series C 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.

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 our Charter or By-laws or the Series C 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 we do 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. We do 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.

**Series B Preferred Stock**

We have 105,875 shares of our Series B Preferred Stock authorized for issuance. As of July 31, 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 shares of our common stock;
-

junior to our debt obligations; and

23

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TABLE OF CONTENTS

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. 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 July 31, 2018.

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 July 31, 2018, 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 July 31, 2018) 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).

**TABLE OF CONTENTS**

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, as amended, or 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 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 Charter, 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.

**Series 1 Preferred Shares**

As of July 31, 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, the sole holder of the Series 1 Preferred Shares, to modify the provisions 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.

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

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- Voting Rights — The holders of the Series 1 Preferred Shares are not entitled to any voting rights.
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- Dividends — Dividend payments can be made in cash or in shares of our common stock, 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 shares of our common stock, the number of shares of common stock is determined by dividing the cash dividend obligation by 95% of the volume average price



TABLE OF CONTENTS

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 shares, plus all unpaid dividends and accrued interest. We have 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 shares of our common stock 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 \$1.30 (our common stock closing price on July 31, 2018) and an exchange rate of U.S. \$1.00 to Cdn. \$1.30 (exchange rate on July 31, 2018) at the time of conversion, we would be required to issue approximately 2,762,104 shares of our common stock.

Terms of Preferred Stock to Be Offered

This section describes the general terms of our preferred stock 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 that may be issued in the future 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 stockholder 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 of directors 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 the issuance of 250,000 shares of preferred stock. Prior to the issuance of each series of preferred stock, our board of directors will adopt resolutions creating and designating the series as a series of preferred stock. Our board of directors may, without stockholder 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:

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the number of shares to constitute such series and the distinctive designation of such series;

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the dividend rate on the shares of such series and the preferences, if any, and the special and relative rights of the shares of such series as to dividends;

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whether or not the shares of such series shall be redeemable, and, if redeemable, the price, terms and manner of redemption;

TABLE OF CONTENTS

- the preferences, if any, and the special and relative rights of 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.

If our board of directors decides to issue any preferred stock, it may discourage or make more difficult a merger, tender offer, business combination, or proxy contest, assumption of control by a holder of a large block of our securities, or the removal of incumbent management, even if these events were favorable to the interests of stockholders. Our board of directors, without stockholder approval, may issue preferred stock with voting and conversion rights and dividend and liquidation preferences that may adversely affect the holders of our other equity or debt securities. 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 of directors. 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

27

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## TABLE OF CONTENTS

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.

### 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.

### 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.

### Registrar and Transfer Agent

The registrar and transfer agent for our preferred stock will be set forth in the applicable prospectus supplement.

## TABLE OF CONTENTS

### DESCRIPTION OF DEBT SECURITIES

The following description of the terms of the debt securities sets forth general terms that may apply to the debt securities and provisions of the indenture that will govern the debt securities, and is not complete. We will describe the particular terms of any debt securities in the prospectus supplement relating to those debt securities.

Our senior debt securities will be issued under an indenture between us and a trustee, a form of which is incorporated by reference into this prospectus and attached as an exhibit to the registration statement of which this prospectus is a part. The indenture relating to the senior debt securities, as amended or otherwise supplemented by any supplemental indentures, is referred to herein as the “senior indenture.” Our subordinated debt securities will be issued under an indenture between us and a trustee, a form of which is incorporated by reference into this prospectus and attached as an exhibit to the registration statement of which this prospectus is a part. The indenture relating to the subordinated debt securities, as amended or otherwise supplemented by any supplemental indentures, is referred to herein as the “subordinated indenture.” The senior indenture and the subordinated indenture are sometimes referred to in this prospectus collectively as the “indenture.” See “Where You Can Find More Information.”

The following is a summary of some provisions of the indenture. The following summary does not purport to be complete, and is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture, including the definitions of specified terms used in the indenture, and the debt securities. We encourage you to read the indenture and the debt securities because they, and not this description, set forth your rights as a holder of our debt securities. We will describe the particular terms of any debt securities in the prospectus supplement relating to those debt securities. Parenthetical section references under this heading are references to sections in the indenture unless we indicate otherwise.

#### General Terms

The indenture does not limit the amount of debt securities that we may issue. (Section 301). The indenture provides that debt securities may be issued up to the principal amount authorized by us from time to time. Unless the applicable prospectus supplement specifies otherwise, the debt securities will be unsecured and will have the same rank as all of our other unsecured debt. Unless a subsidiary is added as a subsidiary guarantor under the indenture, none of our subsidiaries, if any, will have any obligations with respect to the debt securities. Therefore, our rights and the rights of our creditors, including holders of senior debt securities and subordinated debt securities, to participate in the assets of any subsidiary which is not a subsidiary guarantor under the indenture will be subject to the prior claims of the creditors of any such subsidiaries.

We may issue the debt securities in one or more separate series of senior debt securities. (Section 301). The prospectus supplement relating to the particular series of debt securities being offered will specify the particular amounts, prices and terms of those debt securities. These terms may include:

- the title of the debt securities and the series in which the debt securities will be included;
- the authorized denominations and aggregate principal amount of the debt securities;
- the date or dates on which the principal and premium, if any, are payable;
- the rate or rates per annum at which the debt securities will bear interest, if there is any interest, or the method or methods of calculating interest and the date from which interest will accrue;
- the place or places where the principal of and any premium and interest on the debt securities will be payable;
- the dates on which the interest will be payable and the corresponding record dates;

- if applicable, the period or periods within which or the date or dates on which, the price or prices at which, and the terms and conditions on which, the debt securities may be redeemed, in whole or in part, at our option;
- whether the debt securities of the series will be issued in whole or in part;

TABLE OF CONTENTS

- whether the debt securities of the series will be issued in the form of a global security and, if so, the name of the applicable depository and global exchange agent, whether such global form shall be permanent or temporary and, if applicable, the global exchange date;

- if the debt securities of the series are to be issuable initially in the form of a temporary global security, the circumstances under which the temporary global security can be exchanged for definitive debt securities and whether the definitive debt securities will be in global form and whether interest in respect of any portion of such global security payable in respect of an interest payment date prior to the global exchange date shall be paid to any clearing organization with respect to a portion of such global security held for its account;

- any obligation, if any, to redeem, repay or purchase debt securities pursuant to any sinking fund or analogous provisions or at the option of a holder;

- the portion of the principal amount of the debt securities payable upon declaration of the acceleration of the maturity of the debt securities;

- the person to whom any interest on any debt security will be payable if other than the person in whose name the debt security is registered on the applicable record date;

- any events of default, covenants or warranties applicable to the debt securities;

- the currency, currencies or composite currency of denomination of the debt securities;

- the currency, currencies or composite currencies in which payments on the debt securities will be payable and whether the holder may elect payment to be made in a different currency;

- if the amount of payments of principal of (and premium, if any) or interest on the debt securities of the series may be determined with reference to an index, the manner in which such amounts shall be determined;

- if payments of principal of (and premium, if any) or interest on the debt securities of the series are to be made in a foreign currency other than the currency in which such debt securities are denominated, the manner in which the exchange rate with respect to such payments shall be determined;

- whether and under what conditions we will pay additional amounts to holders of the debt securities;

- the terms and conditions of any conversion or exchange provisions in respect of the debt securities;

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the terms pursuant to which our obligation under the indenture may be terminated through the deposit of money or government obligations;

- the person or persons who shall be security registrar for the debt securities of such series if other than the trustee, and the place or places where the security register for such series shall be maintained and the person or persons who will be the initial paying agent or agents, if other than the trustee;
- whether the debt securities of the series will be subordinated in right of payment to any other indebtedness;
- whether or not the debt securities of that series will be secured or unsecured and the terms relating thereto; and
- any other specific terms of the debt securities not inconsistent with the indenture. (Section 301).

Unless otherwise specified in the applicable prospectus supplement, the debt securities will not be listed on any securities exchange.

30

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## TABLE OF CONTENTS

Unless the applicable prospectus supplement specifies otherwise, we will issue the debt securities in fully registered form without coupons. If we issue debt securities of any series in bearer form, the applicable prospectus supplement will describe the special restrictions and considerations, including special offering restrictions and special federal income tax considerations, applicable to those debt securities and to payment on and transfer and exchange of those debt securities.

### U.S. Federal Income Tax Considerations

We may issue the debt securities as original issue discount securities, bearing no interest or bearing interest at a rate, which, at the time of issuance, is below market rates, to be sold at a substantial discount below their principal amount. We will describe some special U.S. federal income tax and other considerations applicable to any debt securities that are issued as original issue discount securities in the applicable prospectus supplement. We encourage you to consult with your own tax and financial advisors on these important matters.

### Payment, Registration, Transfer and Exchange

Subject to any applicable laws or regulations, we will make payments on the debt securities at a designated office or agency, unless the applicable prospectus supplement otherwise sets forth. At our option, however, we may also make interest payments on the debt securities in registered form:

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- by checks mailed to the persons entitled to interest payments at their registered addresses; or
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- by wire transfer to an account maintained by the person entitled to interest payments as specified in the security register.

Unless the applicable prospectus supplement otherwise indicates, we will pay any installment of interest on debt securities in registered form to the person in whose name the debt security is registered at the close of business on the regular record date for that installment of interest. (Section 307). If a holder wishes to receive payment by wire transfer, the holder should provide the paying agent with written wire transfer instructions at least 15 days prior to the payment date.

Unless the applicable prospectus supplement otherwise sets forth, debt securities issued in registered form will be transferable or exchangeable at the agency we may designate from time to time. Debt securities may be transferred or exchanged without service charge, other than any tax or other governmental charge imposed in connection with the transfer or exchange. (Section 305).

### Book-Entry Procedures

The applicable prospectus supplement for each series of debt securities will state whether those debt securities will be subject to the following provisions.

Unless debt securities in physical form are issued, the debt securities will be represented by one or more fully-registered global certificates, in denominations of \$1,000 or any integral multiple of \$1,000. Each global certificate will be deposited with, or on behalf of, The Depository Trust Company, which we refer to in this prospectus as DTC, and registered in its name or in the name of Cede & Co. or other nominee of DTC. No holder of debt securities initially issued as a global certificate will be entitled to receive a certificate in physical form, except as set forth below.

DTC has advised us that:

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- DTC is:
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- a “banking organization” within the meaning of the New York banking law;
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- a limited purpose trust company organized under the New York banking law;

- a member of the Federal Reserve System;
- a “clearing corporation” within the meaning of the New York Uniform Commercial Code; and

31

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TABLE OF CONTENTS

- a “clearing agency” registered pursuant to Section 17A of the Securities Exchange Act of 1934, as amended, or the Exchange Act.

- DTC holds securities for DTC participants and facilitates the settlement of securities transactions between DTC participants through electronic book-entry transfers and pledges, thereby eliminating the need for physical movement of certificates.

- DTC participants include securities brokers and dealers, banks, trust companies, clearing corporations and other organizations.

- Access to DTC’s book-entry system is also available to others, such as banks, brokers, dealers, trust companies and clearing corporations that clear through or maintain a custodial relationship with a DTC participant, either directly or indirectly.

Holders that are not DTC participants but desire to purchase, sell or otherwise transfer ownership of, or other interests in, the debt securities may do so only through DTC participants. In addition, holders of the debt securities will receive all distributions of principal and interest from the trustee through DTC participants. Under the rules, regulations and procedures creating and affecting DTC and its operation, DTC is required to make book-entry transfers of debt securities among DTC participants on whose behalf it acts and to receive and transmit distributions of principal of, and interest on, the debt securities. Under the book-entry system, holders of debt securities may experience some delay in receipt of payments, since the trustee will forward such payments to Cede & Co., as nominee for DTC, and DTC, in turn, will forward the payments to the appropriate DTC participants.

DTC participants will be responsible for distributions to holders of debt securities, which distributions will be made in accordance with customary industry practices. Although holders of debt securities will not have possession of the debt securities, the DTC rules provide a mechanism by which those holders will receive payments and will be able to transfer their interests. Although the DTC participants are expected to convey the rights represented by their interests in any global security to the related holders, because DTC can act only on behalf of DTC participants, the ability of holders of debt securities to pledge the debt securities to persons or entities that are not DTC participants or to otherwise act with respect to the debt securities may be limited due to the lack of physical certificates for the debt securities.

Neither we nor the trustee will be responsible or liable for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the debt securities or for supervising or reviewing any records relating to such beneficial ownership interests. Since the only “holder of debt securities,” for purposes of the indenture, will be DTC or its nominee, the trustee will not recognize beneficial holders of debt securities as “holders of debt securities,” and beneficial holders of debt securities will be permitted to exercise the rights of holders only indirectly through DTC and DTC participants. DTC has advised us that it will take any action permitted to be taken by a holder of debt securities under the indenture only at the direction of one or more DTC participants to whose accounts with DTC the related debt securities are credited.

All payments we make to the trustee will be in immediately available funds and will be passed through to DTC in immediately available funds.

Physical certificates will be issued to holders of a global security, or their nominees, if:

- DTC advises the trustee in writing that DTC is no longer willing, able or eligible to discharge properly its responsibilities as depository and we are unable to locate a qualified successor; or

we decide in our sole discretion to terminate the book-entry system through DTC. (Section 305).

In such event, the trustee will notify all holders of debt securities through DTC participants of the availability of such physical debt securities. Upon surrender by DTC of a definitive global note representing the debt securities and receipt of instructions for reregistration, the trustee will reissue the debt securities in physical form to holders or their nominees. (Section 305).

Debt securities in physical form will be freely transferable and exchangeable at the office of the trustee upon compliance with the requirements set forth in the indenture.

32

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TABLE OF CONTENTS

No service charge will be imposed for any registration of transfer or exchange, but payment of a sum sufficient to cover any tax or other governmental charge may be required. (Section 305).

Consolidation, Merger or Sale by the Company

The indenture generally permits a consolidation or merger between us and another U.S. legal entity. It also permits the sale or transfer by us of all or substantially all of our property and assets to another U.S. legal entity. These transactions are permitted if:

- (A) we are the continuing or surviving legal entity, or (B) the resulting or acquiring legal entity, if other than us, assumes all of our responsibilities and liabilities under the indenture, including the payment of all amounts due on the debt securities and performance of the covenants in the indenture;
- immediately after the transaction, no event of default exists; and
- the trustee shall have received an officer's certificate and an opinion stating such consolidation, merger, conveyance, transfer or lease and, if applicable, the corresponding supplemental indenture, are in compliance with the base indenture. (Section 801).

Even though the indenture contains the provisions described above, we are not required by the indenture to comply with those provisions if we sell all of our property and assets to another U.S. legal entity if, immediately after the sale, that legal entity is one of our wholly-owned subsidiaries. (Section 803).

If we consolidate or merge with or into any other legal entity or sell all or substantially all of our assets according to the terms and conditions of the indenture, the resulting or acquiring legal entity will be substituted for us in the indenture with the same effect as if it had been an original party to the indenture. As a result, the successor legal entity may exercise our rights and powers under the indenture, in our name or in its own name and we will be released from all our liabilities and obligations under the indenture and under the debt securities. (Section 802).

Events of Default, Notice and Certain Rights on Default

Unless otherwise stated in the applicable prospectus supplement, an "event of default," when used with respect to any series of debt securities, means any of the following:

- failure to pay interest on any debt security of that series for 30 days after the payment is due;
- failure to pay the principal of or any premium on any debt security of that series when due;
- failure to deposit any sinking fund payment on debt securities of that series when due;
- failure to perform any other covenant in the indenture that applies to debt securities of that series for 90 days after we have received written notice of the failure to perform in the manner specified in the indenture;
- an event of default under any debt by the company or any significant subsidiary of the company (including a default with respect to any series of debt securities) that results in debt of an outstanding principal amount greater than \$50,000,000 becoming or being declared due and payable and such acceleration has not been rescinded or annulled or such debt has not been discharged for 30 days after we have received written notice in the manner specified in the indenture;

- certain events in bankruptcy, insolvency or reorganization; or
- any other event of default that may be specified for the debt securities of that series when that series is created. (Section 501).

If an event of default for any series of debt securities occurs and continues, the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the series may declare the entire principal of all the debt securities of that series to be due and payable immediately. If a declaration occurs, the holders of a majority of the aggregate principal amount of the outstanding debt securities of that series can, subject to certain conditions, rescind the declaration. (Section 502).

33

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## TABLE OF CONTENTS

The prospectus supplement relating to each series of debt securities which are original issue discount securities will describe the particular provisions that relate to the acceleration of maturity of a portion of the principal amount of that series when an event of default occurs and continues.

An event of default for a particular series of debt securities does not necessarily constitute an event of default for any other series of debt securities issued under the indenture.

The indenture requires us to furnish an officer's certificate to the trustee each year as to the knowledge of our principal executive, financial or accounting officer of our compliance with all conditions and covenants under the indenture. (Section 1006). The trustee will transmit by mail to the holders of debt securities of a series notice of any default. Other than its duties in the case of a default, the trustee will not be obligated to exercise any of its rights or powers under an indenture at the request, order or direction of any holders, unless the holders offer the trustee indemnification satisfactory to the trustee. (Section 603). If indemnification satisfactory to the trustee is provided, then, subject to certain other rights of the trustee, the holders of a majority in principal amount of the outstanding debt securities of any series may, with respect to the debt securities of that series, direct the time, method and place of:

- conducting any proceeding for any remedy available to the trustee; or

- exercising any trust or power conferred upon the trustee. (Section 512).

The holder of a debt security of any series will have the right to begin any proceeding with respect to the indenture or for any remedy only if:

- the holder has previously given the trustee written notice of a continuing event of default with respect to that series;

- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made a written request of, and offered indemnification to, the trustee to begin the proceeding;

- the trustee has not started the proceeding within 60 days after receiving the request; and

- the trustee has not received directions inconsistent with the request from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series during those 60 days. (Section 507).

The holders of not less than a majority in aggregate principal amount of any series of debt securities, by notice to the trustee for that series, may waive, on behalf of the holders of all debt securities of that series, any past default or event of default with respect to that series and its consequences. (Section 513). A default or event of default in the payment of the principal of, or premium or interest on, any debt security and certain other defaults may not, however, be waived. (Sections 508 and 513).

### Modification of the Indenture

We, as well as the trustee for a series of debt securities, may enter into one or more supplemental indentures, without the consent of, or notice to, the holders of any of the debt securities, in order to:

- evidence the succession of another corporation to us and the assumption of our covenants by a successor;

- add to our covenants or surrender any of our rights or powers;

add additional events of default for any series;

- change or eliminate any restrictions on the payment of principal of (or premium, if any, on) debt securities, provided such action will not adversely affect the interest of holders of any series of debt securities in any material respect;
- permit or facilitate the issuance of debt securities in uncertificated form, provided such action will not adversely affect the interests of holders of any series of debt securities in any material respect;

34

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TABLE OF CONTENTS

- secure the debt securities;
- change or eliminate any of the provisions of the indenture, provided that any such change or elimination (a) shall become effective only when there is no debt security outstanding of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provisions or (b) shall not apply to any debt security outstanding;
- establish the form or terms of debt securities not yet issued;
- evidence and provide for successor trustees;
- change or eliminate provisions or add any other provisions that are required or desirable in accordance with any amendments to the Trust Indenture Act of 1939, which we refer to in this prospectus as the Trust Indenture Act, on the condition that this action does not adversely affect the interests of any holder of debt securities of any series issued under the indenture in any material respect;
- comply with requirements of the SEC in order to maintain the qualification of the indenture under the Trust Indenture Act;
- provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- make any change that would provide additional rights or benefits to holders of debt securities or any series, or that does not adversely affect the legal rights of such holders under the indenture;
- supplement any provisions of the indenture to facilitate defeasance and discharge of any series of debt securities, provided such action will not adversely affect the interest of the holders of debt securities of such series or any other series;
- conform text of the indenture or any debt securities to the description thereof in any prospectus supplement;
- cure any ambiguity or correct any mistake;
- add a subsidiary guarantor under the indenture or release a subsidiary guarantor in accordance with the indenture; or
- make any other provision with respect to the indenture, provided that such actions will not adversely affect the interests of the holders, as determined in good faith by our board of directors (Section 901).

In addition, with the consent of the holders of not less than a majority in aggregate principal amount of the outstanding debt securities of all series affected by the supplemental indenture, we and the trustee may execute supplemental indentures adding any provisions to or changing or eliminating any of the provisions of the indenture or any supplemental indenture or modifying the rights of the holders of debt securities of that series. No such supplemental indenture may, however, without the consent of the holder of each debt security that is affected:

- change the time for payment of principal or interest on any debt security;
- reduce the principal of, or any installment of principal of, or interest on, any debt security;
- reduce the amount of premium, if any, payable upon the redemption or repayment of any debt security;
- change any obligation of the company to pay additional amounts;
- reduce the amount of principal payable upon acceleration of the maturity of an original issue discount debt security;
- impair the right to institute suit for the enforcement of any payment on or for any debt security;
- reduce the percentage in principal amount of the outstanding debt securities of any series the consent of whose holders is required for modification or amendment of the indenture or for waiver of compliance with certain provisions of the indenture or for waiver of certain defaults;



TABLE OF CONTENTS

- modify the provisions relating to waiver of some defaults or any of the foregoing provisions;
- change the currency of payment;
- adversely affect the right to repayment of debt securities of any series at the option of the holders of those debt securities; or
- change the place of payment. (Section 902).

Any supplemental indenture will be filed with the SEC as an exhibit to:

- a post-effective amendment to the registration statement of which this prospectus is a part;
- an annual report on Form 10-K;
- a quarterly report on Form 10-Q; or
- a current report on Form 8-K.

Defeasance and Covenant Defeasance

When we use the term defeasance, we mean discharge from some or all of our obligations under the indenture. If we deposit with the trustee sufficient cash or government obligations to pay the principal, interest, any premium and any mandatory sinking fund or analogous payments due to the stated maturity or a redemption date of the debt securities of a particular series, then at our option:

- we will be discharged from our obligations for the debt securities of that series, the holders of the debt securities of the affected series will no longer be entitled to the benefits of the indenture, except for registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities, and those holders may look only to the deposited funds or obligations for payment, which is referred to as “defeasance”; or
- we will no longer be under any obligation to comply with certain covenants under the indenture as it relates to that series, and some events of default will no longer apply to us, which is referred to as “covenant defeasance.” (Sections 403 and 1401).

Unless the applicable prospectus supplement specifies otherwise and except as described below, the conditions to both defeasance and covenant defeasance are as follows:

- it must not result in a breach or violation of, or constitute a default or event of default under, the indenture, or result in a breach or violation of, or constitute a default under, any other of our other agreements or instruments;
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certain bankruptcy-related defaults or events of default with respect to us must not have occurred and be occurring during the period commencing on the date of the deposit of the trust funds to defease the debt securities and ending on the 91st day after that date;

- we must deliver to the trustee an officer's certificate and an opinion of counsel addressing compliance with the conditions of the defeasance or covenant defeasance; and

- we must comply with any additional conditions to the defeasance or covenant defeasance that the indenture may impose on us. (Sections 403 and 1401).

In the event that government obligations deposited with the trustee for the defeasance of such debt securities decrease in value or default subsequent to their being deposited, we will have no further obligation, and the holders of the debt securities will have no additional recourse against us, for any decrease in value or default. If indicated in the prospectus supplement, in addition to obligations of the United States or an agency or instrumentality of the United States, government obligations may include obligations of the government or an agency or instrumentality of the government issuing the currency in which debt securities of such series are payable.

We may exercise our defeasance option for the debt securities even if we have already exercised our covenant defeasance option. If we exercise our defeasance option, payment of the debt securities may not be accelerated because of default or an event of default. If we exercise our covenant defeasance option,

36

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TABLE OF CONTENTS

payment of the debt securities may not be accelerated because of default or an event of default with respect to the covenants to which the covenant defeasance is applicable. If, however, acceleration occurs, the realizable value at the acceleration date of the money and government obligations in the defeasance trust could be less than the principal and interest then due on the debt securities, because the required deposit in the defeasance trust is based on scheduled cash flow rather than market value, which will vary depending on interest rates and other factors.

Conversion and Exchange Rights

The debt securities of any series may be convertible into or exchangeable for other securities of our company or another issuer or property or cash on the terms and subject to the conditions set forth in the applicable prospectus supplement. (Section 301).

Governing Law

The indenture and the debt securities will be governed by, and construed under, the laws of the State of New York without regard to conflicts of laws principles thereof.

Ranking

The senior debt securities will be our senior and unsubordinated obligations, ranking equally and ratably with all our other existing and future senior and unsubordinated obligations. Unless the applicable prospectus supplement specifies otherwise, the senior debt securities will be effectively subordinated to all of our existing and future secured indebtedness.

Unless the applicable prospectus supplement specifies otherwise, the subordinated debt securities will be subordinated, in right of payment, to the prior payment in full of the senior indebtedness, including the senior debt securities, whether outstanding at the date of the subordinated indenture or thereafter incurred, assumed or guaranteed.

The term “senior indebtedness” means:

- the principal of and premium, if any, and unpaid interest on indebtedness for money borrowed;
- all indebtedness evidenced by notes, debentures, bonds or other securities;
- purchase money and similar obligations;
- obligations under capital leases determined in accordance with generally accepted accounting principles as in effect in the United States on July 1, 2018 (without giving effect to any phase-in of the effectiveness of any change in generally accepted accounting principles that has been adopted as of such date);
- guarantees, assumptions or purchase commitments relating to, or other transactions as a result of which we are responsible for the payment of, indebtedness of others;
- renewals, extensions and refunding of any senior indebtedness;
- interest or obligations in respect of any senior indebtedness accruing after the commencement of any insolvency or bankruptcy proceedings; and
- obligations associated with derivative products, including interest rate and currency exchange contracts, foreign exchange contracts, commodity contracts, and similar arrangements unless, in each case, the instrument by which we incurred, assumed or guaranteed the indebtedness or obligations described in the foregoing clauses expressly provides

that the indebtedness or obligation is not senior in right of payment to the subordinated debt securities.

Upon any distribution of our assets in connection with any dissolution, winding up, liquidation or reorganization of our company, whether in a bankruptcy, insolvency, reorganization or receivership proceeding or upon an assignment for the benefit of creditors generally or any other marshalling of our assets and liabilities or otherwise, except a distribution in connection with a merger or consolidation or a conveyance or transfer of all or substantially all of our properties in accordance with the subordinated indenture, the holders of all senior indebtedness will first be entitled to receive payment of the full amount

37

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TABLE OF CONTENTS

due on the senior indebtedness, or provision will be made for that payment in money or money's worth, before the holders of any of the subordinated debt securities are entitled to receive any payment in respect of the subordinated debt securities. (subordinated indenture, Section 1501).

In the event that a payment default occurs and is continuing with respect to the senior indebtedness, the holders of all senior indebtedness will first be entitled to receive payment of the full amount due on the senior indebtedness, or provision will be made for that payment in money or money's worth, before the holders of any of the subordinated debt securities are entitled to receive any payment in respect of the subordinated debt securities. In the event that the principal of the subordinated debt securities of any series is declared due and payable pursuant to the subordinated indenture and that declaration is not rescinded and annulled, the holders of all senior indebtedness outstanding at the time of the declaration will first be entitled to receive payment of the full amount due on the senior indebtedness, or provision will be made for that payment in money or money's worth, before the holders of any of the subordinated debt securities are entitled to receive any payment in respect of the subordinated debt securities. (subordinated indenture, Section 1501)

This subordination will not prevent the occurrence of any event of default with respect to the subordinated debt securities. (subordinated indenture, Section 1503). There is no limitation on the issuance of additional senior indebtedness in the subordinated indenture.

Regarding the Trustee

We may from time to time maintain lines of credit, and have other customary banking relationships, with the trustee or its affiliates under the senior indenture or the trustee or its affiliates under the subordinated indenture.

The indenture and provisions of the Trust Indenture Act that are incorporated by reference therein contain limitations on the rights of the trustee, should it become one of our creditors, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claim as security or otherwise. The trustee is permitted to engage in other transactions with us or any of our affiliates; provided, however, that if it acquires any conflicting interest (as defined under the Trust Indenture Act), it must eliminate such conflict or resign.

TABLE OF CONTENTS

DESCRIPTION OF WARRANTS

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

Debt Warrants

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;
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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 anti-dilution 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.

TABLE OF CONTENTS

Common Stock Warrants

If we offer warrants for the purchase of common stock, a prospectus supplement relating to the warrants being offered 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.





## TABLE OF CONTENTS

### DESCRIPTION OF UNITS

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

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

#### General

We may issue units comprised of one or more shares of common stock or 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 Common Stock,” “Description of Preferred Stock,” and “Description of Warrants” will apply to each unit and to any debt, shares of capital stock or warrant included in each unit, respectively.

#### Issuance in Series

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

#### Enforceability of Rights by Holders of Units

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

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



## TABLE OF CONTENTS

### LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depository, or warrant agent maintain for this purpose as the “holders” of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names as “indirect holders” of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

#### Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depository on behalf of other financial institutions that participate in the depository’s book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers. Upon the issuance of a global security, the depository will credit, on its book-entry registration and transfer system, the participants’ accounts with the respective principal amounts of the book-entry securities represented by the global security beneficially owned by such participants. The accounts to be credited will be designated by any dealers, underwriters, or agents participating in the distribution of the book-entry securities. Ownership of book-entry securities will be shown on, and the transfer of the ownership interests will be effected only through, records maintained by the depository for the related global security (with respect to interests of participants) and on the records of participants (with respect to interests of persons holding through participants). The laws of some states may require that certain purchasers of securities take physical delivery of such securities in definitive form. These laws may impair the ability to own, transfer, or pledge beneficial interests in book-entry securities.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depository or its participants. Consequently, for securities issued in global form, we will recognize only the depository as the holder of the securities, and we will make all payments on the securities to the depository. The depository passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depository and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker, or other financial institution that participates in the depository’s book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

See also the section entitled “Description of Debt Securities — Book-Entry Procedures” for additional information.

#### Street Name Holders

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in “street name.” Securities held by an investor in street name would be registered in the name of a bank, broker, or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he, she, or it maintains at that institution. For securities held in street name, we will recognize only the intermediary banks, brokers, and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

## TABLE OF CONTENTS

### Legal Holders

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name, or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders but does not do so. Whether and how the holders contact the indirect holders is up to the holders.

### Special Considerations For Indirect Holders

If you hold securities through a bank, broker, or other financial institution, either in book-entry form or in street name, you should check with your own institution to determine the following:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

### Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms. Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee, or a successor depositary, unless special termination situations arise. We describe those situations below under "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank, or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated.

If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

We may at any time and in our sole discretion determine not to have any of the book-entry securities of any series represented by one or more global securities and, in that event, we will issue certificated securities in exchange for the global securities of that series.

43

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## TABLE OF CONTENTS

### Special Considerations For Global Securities

The rights of an indirect holder relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security. If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his, her, or its name, and cannot obtain non-global certificates for his, her, or its interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his, her, or its own bank or broker for payments on the securities and protection of his, her, or its legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his, her, or its interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges, and other matters relating to an investor's interest in a global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices, and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

### Special Situations When a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

- if the depositary notifies us that it is no longer willing, able or eligible to discharge properly its responsibilities as depositary and we are unable to locate a qualified successor;
- if we decide in our sole discretion to terminate that global security.

The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular types and series of securities covered by the applicable prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

44

---



TABLE OF CONTENTS

CERTAIN PROVISIONS OF DELAWARE LAW, OUR CHARTER, AND BY-LAWS

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 stockholders. Some of these provisions, including, but not limited to, the inability of stockholders to take action by unanimous written consent, certain advance notice requirements for stockholder 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 stockholder 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 stockholders 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 stockholder action, could also delay or frustrate the removal of incumbent directors or the assumption of control by stockholders, even if the removal or assumption would be beneficial to our stockholders. These provisions could also discourage or inhibit a merger, tender offer or proxy contest, even if favorable to the interests of stockholders, 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 stockholders. 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 stockholder” for a period of three years following the date such person became an “interested stockholder” unless:

- before such person became an interested stockholder, the board of directors of the corporation approved either the business combination or the transaction that resulted in the interested stockholder becoming an interested stockholder;
- upon the consummation of the transaction that resulted in the interested stockholder becoming an interested stockholder, the interested stockholder 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 stockholder, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders (and not by written consent) by the affirmative vote of the holders of at least 66 $\frac{2}{3}$ % of the outstanding voting stock of the corporation which is not owned by the interested stockholder.

The term “interested stockholder” generally is defined as a person who, together with affiliates and associates, owns, or, within the three years prior to the determination of interested stockholder 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 stockholder. Section 203 makes it more difficult for an “interested stockholder” 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

TABLE OF CONTENTS

of directors, including discouraging attempts that might result in a premium over the market price for the shares of our common stock held by stockholders. 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.

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.

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 stockholders 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.

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We may sell the securities under this prospectus in one or more of the following ways from time to time:

- through agents;
- to or through underwriters;
- through dealers;
- directly to one or more purchasers; or
- through a combination of these methods of sale.

The securities that we distribute by any of these methods may be sold, in one or more transactions, at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to prevailing market prices;
- negotiated prices; or
- a combination of these pricing methods.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

- the name or names of any agents, underwriters, or dealers;
- the purchase price of our securities being offered and the proceeds from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and commissions and other items constituting agents' or underwriters' compensation;
- the public offering price;

- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which such securities may be listed.

Unless otherwise indicated in the applicable prospectus supplement, if we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account. The underwriters may resell the securities 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 obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. Unless otherwise indicated in a prospectus supplement, the underwriters will be obligated to purchase all the securities offered if they purchase any of the securities offered. We may change from time to time any initial public offering price and any discounts or concessions the underwriters allow or reallocate or pay to dealers. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement naming the underwriter the nature of any such relationship. We may designate agents who agree to use their reasonable efforts to solicit purchases for the period of their appointment or to sell securities on a continuing basis. We may also sell securities directly to one or more purchasers without using underwriters or agents.

Underwriters, dealers, or agents may receive compensation in the form of discounts, concessions, or commissions from us or from purchasers of the securities as their agents in connection with the sale of the securities. These underwriters, dealers, or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions, or profits on resale received by underwriters, dealers, or agents may be treated as underwriting discounts and commissions. Each prospectus supplement will identify any underwriter, dealer, or agent and describe any compensation received by them from us. Any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

TABLE OF CONTENTS

In compliance with the guidelines of the Financial Industry Regulatory Authority, or FINRA, the aggregate maximum discount, commission or agency fees or other items constituting underwriting compensation to be received by any FINRA member or independent broker-dealer will not exceed 8% of the proceeds from any offering pursuant to this prospectus and any applicable prospectus supplement.

In connection with any offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions, and penalty bids in accordance with Regulation M under the Exchange Act.

- Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum.

- Over-allotment involves sales by the underwriters of shares of our common stock in excess of the number of shares the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of shares of our common stock over-allotted by the underwriters is not greater than the number of shares that they may purchase in the over-allotment option. In a naked short position, the number of shares of our common stock involved is greater than the number of shares in the over-allotment option. The underwriters may close out any covered short position by either exercising their over-allotment option or purchasing shares of our common stock in the open market.

- Syndicate covering transactions involve purchases of our common stock in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the source of shares to close out the short position, the underwriters will consider, among other things, the price of shares of our common stock available for purchase in the open market as compared to the price at which they may purchase shares through the over-allotment option so that if there is a naked short position, the position can only be closed out by buying shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the shares of our common stock in the open market after the pricing of any offering that could adversely affect investors who purchase in that offering.

- Penalty bids permit the representatives of the underwriters to reclaim a selling concession from a syndicate member when the common stock originally sold by the syndicate member is purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, over-allotments, syndicate covering transactions, and penalty bids may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. These transactions may be effected on the Nasdaq Global Market or otherwise and, if commenced, may be discontinued at any time.

Underwriters, dealers, and agents may be entitled under agreements entered into with us to indemnification against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments they may be required to make in respect of these liabilities. Underwriters, dealers, and agents and their affiliates may be customers of, may engage in transactions with, or perform services for us in the ordinary course of business for which they receive compensation.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the

48

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## TABLE OF CONTENTS

specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered 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 fixed public offering prices; and
- at varying prices determined by the underwriters at the time of sale.

In addition, unless otherwise indicated in the applicable prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to specified conditions precedent and that the underwriters with respect to a sale of offered securities will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

If a dealer is utilized in the sales of offered securities, we will sell the offered securities to the dealer as principal. The dealer may then resell the offered securities to the public at varying prices to be determined by the dealer at the time of resale. Any dealer may be deemed to be an underwriter of the offered securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may directly solicit offers to purchase offered securities and sell offered securities directly to institutional investors or others with respect to any resale of the offered securities. The terms of any of these sales will be described in the applicable prospectus supplement.

In order to comply with the securities laws of some states, if applicable, the shares of common stock offered by this prospectus must be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock 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. To the extent required, this prospectus may be amended or supplemented from time to time to describe a specific plan of distribution.

## LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by Foley & Lardner LLP, Boston, Massachusetts.

## EXPERTS

The consolidated financial statements of FuelCell Energy, Inc. and subsidiaries 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.

## TABLE OF CONTENTS

### 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.

### INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) between the date of the initial registration statement and the effectiveness of the registration statement and following the effectiveness of the registration statement until the offering of the securities under the registration statement is terminated or completed:

- our Annual Report on Form 10-K for the fiscal year ended October 31, 2017 filed with the SEC on January 11, 2018, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our definitive proxy statement for the 2018 Annual Meeting of Stockholders;
- our Quarterly Reports on Form 10-Q for the quarterly periods ended January 31, 2018 and April 30, 2018, filed with the SEC on March 8, 2018 and June 7, 2018, respectively;
- our Current Reports on Form 8-K filed with the SEC on November 1, 2017, December 15, 2017, April 2, 2018, April 6, 2018, June 13, 2018 and June 20, 2018; and
- the description of our common stock set forth in our registration statement on Form 8-A, filed with the SEC on June 6, 2000, including any amendments or reports filed for the purposes of updating this description.





TABLE OF CONTENTS

Notwithstanding the foregoing, information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference in this prospectus.

You may request a copy of any or all of these documents, which will be provided to you at no cost, by writing or telephoning us using the following contact information:

FuelCell Energy, Inc.

Attention: Corporate Secretary

3 Great Pasture Road

Danbury, Connecticut 06813

Telephone: (203) 825-6000

You should rely only on the information contained in this prospectus, including information incorporated by reference as described above, any accompanying prospectus supplement or any “free writing prospectus” that we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this 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. Furthermore, you should not consider this 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.

51

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TABLE OF CONTENTS

## PART II

## INFORMATION NOT REQUIRED IN PROSPECTUS

## Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses payable by the registrant in connection with the registration of the securities being registered hereby:

Securities and Exchange Commission registration fee	\$ 24,900
Transfer agent's, trustee's and depository's fees and expenses	*
Printing expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Miscellaneous	*
Total expenses	\$ 24,900

\*

Amount is presently not known.

## Item 15. Indemnification of Directors and Officers.

## Delaware General Corporation Law

Section 145 of the Delaware General Corporation Law (the "DGCL") provides that a corporation may indemnify any person who was or is, or is threatened to be made, a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of such corporation, and, with respect to any criminal actions and proceedings, had no reasonable cause to believe that such person's conduct was unlawful.

In addition, under Section 145 of the DGCL, a Delaware corporation may indemnify any person who was or is, or is threatened to be made, a party to any threatened, pending or contemplated action or suit by or in the right of such corporation to procure a judgment in its favor, by reason of the fact that such person is or was a director, officer, employee or agent of such corporation, or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of such corporation and except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to such corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

To the extent that an officer or director of a corporation has been successful, on the merits or otherwise, in the defense of any action, suit or proceeding referred to above, or in defense of any claim, issue or matter therein, the corporation must indemnify such person against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

II-1

**TABLE OF CONTENTS**

Certificate of Incorporation, as amended, Amended and Restated By-Laws, and Insurance

The Company's Certificate of Incorporation, as amended, provides that the Company may, to the fullest extent permitted by Section 145 of the DGCL, indemnify any and all persons whom it shall have power to indemnify under said section from and against any and all of the expenses, liabilities or other matters referred to in or covered by said section. The Company's Certificate of Incorporation, as amended, further provides that no director will be personally liable to the Company or its stockholders for monetary damages for any breach of fiduciary duty by such director as a director; provided, however, that a director will be liable to the extent provided by applicable law (i) for breach of such director's duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) pursuant to Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit.

The Company's Amended and Restated By-laws also provide for indemnification of the Company's officers and directors to the fullest extent permitted by applicable law.

In addition, the Company maintains directors' and officers' liability insurance policies.

Item 16. Exhibits.

**EXHIBIT INDEX**

Exhibit Number	Description of Exhibit
1.1*	Form of Underwriting Agreement.
<u>4.1</u>	<u>Certificate of Incorporation of the Company, as amended, July 12, 1999 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated September 21, 1999).</u>
<u>4.2</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated October 31, 2003 (incorporated by reference to Exhibit 3.11 to the Company's Current Report on Form 8-K dated November 3, 2003).</u>
<u>4.3</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated November 21, 2000 (incorporated by reference to Exhibit 3.3 to the Company's Annual Report on Form 10-K dated January 12, 2017).</u>
<u>4.4</u>	<u>Amended Certificate of Designation of Series B Cumulative Convertible Perpetual Preferred Stock, dated March 14, 2005 (incorporated by reference to Exhibit 3.4 to the Company's Annual Report on Form 10-K dated January 12, 2017).</u>
<u>4.5</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated April 8, 2011 (incorporated by reference to Exhibit 3.5 to the Company's Annual Report on Form 10-K dated January 12, 2017).</u>
<u>4.6</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated April 5, 2012 (incorporated by reference to Exhibit 3.6 to the Company's Annual Report on Form 10-K dated January 12, 2017).</u>
<u>4.7</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated December 3, 2015 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated December 3, 2015).</u>
<u>4.8</u>	<u>Amended and Restated By-Laws of the Company, dated December 15, 2016 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated December 15, 2016).</u>
<u>4.9</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated April 18, 2016 (incorporated by reference to Exhibit 3.9 to the Company's Quarterly Report on Form 10-Q for the period ending April 30, 2016).</u>
<u>4.10</u>	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated April 7, 2017 (incorporated by reference to Exhibit 3.10 to the Company's Quarterly Report on Form 10-Q for the period ending April 30, 2017).</u>

II-2



**TABLE OF CONTENTS**

Exhibit Number	Description of Exhibit
4.11	<u>Certificate of Amendment of the Certificate of Incorporation of the Company, dated December 14, 2017 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated December 14, 2017).</u>
4.12	<u>Specimen of Common Share Certificate (incorporated by reference to Exhibit 4 to the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on January 31, 2000.)</u>
4.13	<u>Schedule A to Articles of Amendment of FuelCell Energy, Ltd., setting forth the rights, privileges, restrictions and conditions of Class A Cumulative Redeemable Exchangeable Preferred Shares (incorporated by reference to Exhibit 4.2 to the Company's Quarterly Report on Form 10-Q for the period ended January 31, 2009).</u>
4.14	<u>Certificate of Designations for the Company's Series C Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, dated September 5, 2017).</u>
4.15†	<u>Form of Senior Indenture.</u>
4.16†	<u>Form of Subordinated Indenture.</u>
4.17*	Form of Senior Debt Security.
4.18*	Form of Subordinated Debt Security.
4.19*	Form of Warrant Agreement and Certificate.
4.20*	Form of Unit Agreement and Certificate.
5.1†	<u>Opinion of Foley &amp; Lardner LLP.</u>
12.1*	Statement of Computation of Ratio of Earnings to Fixed Charges and Preferred Stock Dividends.
23.1†	<u>Consent of KPMG LLP, independent registered public accounting firm.</u>
23.2†	<u>Consent of Foley &amp; Lardner LLP (included in Exhibit 5.1).</u>
24.1†	<u>Power of Attorney (included on signature page).</u>
25.1**	Statement of Eligibility on Form T-1 under the Trust Indenture Act of 1939 of the Trustee under the Indenture.

\*

To be filed by amendment to this registration statement or by a report filed under the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

\*\*

To be filed in accordance with the requirements of Section 305(b)(2) of the Trust Indenture Act of 1939 and Rule 5b-3 thereunder.

†

Filed herewith.

Item 17. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental

change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.

II-3

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TABLE OF CONTENTS

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement; Provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

A. Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a Registration Statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the Registration Statement relating to the securities in the Registration Statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a Registration Statement or prospectus that is part of the Registration Statement or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;



TABLE OF CONTENTS

(iii)  
The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and

(iv)  
Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

(d) The undersigned Registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the SEC under Section 305(b)(2) of the Trust Indenture Act.

II-5

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TABLE OF CONTENTS

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Danbury, State of Connecticut, on August 10, 2018.

FUELCELL ENERGY, INC.

/s/ Michael S. Bishop

Name: Michael S. Bishop

Title: Senior Vice President, Chief Financial Officer and Treasurer

S-1

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TABLE OF CONTENTS

## POWER OF ATTORNEY

Such person whose signature appears below hereby appoints Arthur A. Bottone and Michael S. Bishop, and each of them, each of whom may act without joinder of the other, as his or her true and lawful attorney-in-fact and agent, with full power and substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to execute in the name and on behalf of such person any amendment or any post-effective amendment to this Registration Statement, and any registration statement relating to any offering made in connection with the offering covered by this Registration Statement that is to be effective on filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing appropriate or necessary to be done, as full and for all intents and purposes and he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or their substitute or substitutes may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Arthur A. Bottone	President, Chief Executive Officer and Director (Principal Executive Officer)	August 10, 2018
Arthur A. Bottone		
/s/ Michael S. Bishop	Senior Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	August 10, 2018
Michael S. Bishop		
/s/ James H. England	Director	August 10, 2018
James H. England		
/s/ Matthew F. Hilzinger	Director	August 10, 2018
Matthew F. Hilzinger		
/s/ John A. Rolls	Director — Chairman of the Board	August 10, 2018
John A. Rolls		
/s/ Christopher S. Sotos	Director	August 10, 2018
Christopher S. Sotos		
/s/ Natica von Althann	Director	August 10, 2018
Natica von Althann		