

PLUG POWER INC
Form 424B5
March 20, 2019

Use these links to rapidly review the document

[TABLE OF CONTENTS](#)

[Table of Contents](#)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-214737

PROSPECTUS SUPPLEMENT
(to Prospectus dated December 9, 2016)

10,000,000 Shares

Common Stock

We are offering 10,000,000 shares of our common stock, with a par value of \$0.01 per share for an issue price of \$2.35 per share. Our common stock is traded on the NASDAQ Capital Market under the symbol "PLUG." The last reported sale price of our common stock on the NASDAQ Capital Market on March 19, 2019 was \$2.52 per share.

This offering is being made without an underwriter or a placement agent and we will not be paying any underwriting discounts or commissions in connection with this offering. We will receive all of the proceeds from the common stock sold in this offering. We will receive net proceeds from the sale of these shares of approximately \$23.5 million.

Investing in our securities involves risks. See "Risk Factors" beginning on page S-12 of this prospectus supplement.

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

Edgar Filing: PLUG POWER INC - Form 424B5

Delivery of the common stock at the closing of the offering is expected to be made on or about March 20, 2019.

The date of this prospectus supplement is March 20, 2019.

Table of Contents

TABLE OF CONTENTS

Prospectus Supplement

<u>ABOUT THIS PROSPECTUS SUPPLEMENT</u>	<u>S-3</u>
<u>WHERE YOU CAN FIND MORE INFORMATION</u>	<u>S-4</u>
<u>INCORPORATION BY REFERENCE</u>	<u>S-4</u>
<u>SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS</u>	<u>S-5</u>
<u>SUMMARY</u>	<u>S-7</u>
<u>THE OFFERING</u>	<u>S-8</u>
<u>SUMMARY SELECTED CONSOLIDATED FINANCIAL DATA</u>	<u>S-9</u>
<u>RISK FACTORS</u>	<u>S-12</u>
<u>USE OF PROCEEDS</u>	<u>S-18</u>
<u>DILUTION</u>	<u>S-19</u>
<u>MARKET INFORMATION FOR COMMON STOCK</u>	<u>S-20</u>
<u>DIVIDEND POLICY</u>	<u>S-21</u>
<u>CAPITALIZATION</u>	<u>S-22</u>
<u>PLAN OF DISTRIBUTION</u>	<u>S-24</u>
<u>MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS</u>	<u>S-25</u>
<u>LEGAL MATTERS</u>	<u>S-29</u>
<u>EXPERTS</u>	<u>S-29</u>
Prospectus	

<u>ABOUT THIS PROSPECTUS</u>	<u>1</u>
<u>SUMMARY</u>	<u>2</u>
<u>RISK FACTORS</u>	<u>6</u>
<u>FORWARD-LOOKING STATEMENTS</u>	<u>6</u>
<u>RATIO OF COMBINED FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS</u>	<u>8</u>
<u>USE OF PROCEEDS</u>	<u>8</u>
<u>PLAN OF DISTRIBUTION</u>	<u>8</u>
<u>DESCRIPTION OF CAPITAL STOCK</u>	<u>11</u>
<u>DESCRIPTION OF WARRANTS</u>	<u>18</u>
<u>DESCRIPTION OF OUR DEBT SECURITIES</u>	<u>21</u>
<u>DESCRIPTION OF UNITS</u>	<u>28</u>
<u>LEGAL MATTERS</u>	<u>29</u>
<u>EXPERTS</u>	<u>29</u>
<u>WHERE YOU CAN FIND ADDITIONAL INFORMATION</u>	<u>29</u>
<u>INCORPORATION OF CERTAIN INFORMATION BY REFERENCE</u>	<u>30</u>

Table of Contents

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is part of the registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a "shelf" registration process and consists of two parts. The first part is this prospectus supplement, including the documents incorporated by reference, which describes the specific terms of this offering. The second part, the accompanying prospectus, including the documents incorporated by reference, gives more general information, some of which may not apply to this offering. Generally, when we refer only to the "prospectus," we are referring to both parts combined. This prospectus supplement may add to, update or change information in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement or the accompanying prospectus.

If information in this prospectus supplement is inconsistent with the accompanying prospectus or with any document incorporated by reference that was filed with the SEC before the date of this prospectus supplement, you should rely on this prospectus supplement. This prospectus supplement, the accompanying prospectus and the documents incorporated into each by reference include important information about us, the securities being offered and other information you should know before investing in our securities. You should also read and consider information in the documents we have referred you to in the section of this prospectus supplement and the accompanying prospectus entitled "Incorporation by Reference," "Incorporation of Certain Information by Reference" and "Where You Can Find Additional Information" as well as any free writing prospectus provided in connection with this offering.

You should rely only on this prospectus supplement, the accompanying prospectus, and any free writing prospectus provided in connection with this offering and the information incorporated or deemed to be incorporated by reference in this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, and any free writing prospectus provided in connection with this offering. If anyone provides you with different or inconsistent information, you should not rely on it. We are not offering to sell these securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering is accurate as of any date other than as of the date of this prospectus supplement, the accompanying prospectus, or such free writing prospectus, as the case may be, or in the case of the documents incorporated by reference, the date of such documents regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or any sale of our securities. Our business, financial condition, liquidity, results of operations and prospects may have changed since those dates.

All references in this prospectus supplement or the accompanying prospectus to "Plug Power," the "Company," "we," "us," or "our" mean Plug Power Inc. and our subsidiaries, unless we state otherwise or the context otherwise requires.

No action is being taken in any jurisdiction outside the United States to permit a public offering of the securities or possession or distribution of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering in that jurisdiction. Persons who come into possession of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement, the accompanying prospectus, or any free writing prospectus provided in connection with this offering applicable to that jurisdiction.

Table of Contents

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the common stock offered by this prospectus supplement and the accompanying prospectus. This prospectus supplement, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules.

We file annual, quarterly and current reports and other information with the SEC. The SEC maintains an internet website at www.sec.gov that contains periodic and current reports, proxy and information statements, and other information regarding registrants that are filed electronically with the SEC.

These documents are also available, free of charge, through the Investors section of our website, which is located at www.plugpower.com. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and you should not consider information on our website to be part of this prospectus supplement or the accompanying prospectus.

INCORPORATION BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with it. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a registration statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. This prospectus supplement and the accompanying prospectus omit certain information contained in the registration statement, as permitted by the SEC. You should refer to the registration statement, including the exhibits thereto, for further information about us and the securities being offered pursuant to this prospectus supplement and the accompanying prospectus. Statements in this prospectus supplement and the accompanying prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the registration statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the registration statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where You Can Find More Information." The documents we are incorporating by reference are:

our Annual Report on Form 10-K for the year ended December 31, 2018, filed on March 13, 2019; and

the section entitled "Description of Registrant's Securities to be Registered" contained in our Registration Statement on Form 8-A, filed pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, on June 24, 2009, as amended by the Amendment No. 1 to Form 8-A filed by the Company with the SEC on May 6, 2011, the Amendment No. 2 to Form 8-A filed by the Company with the SEC on March 19, 2012, the Amendment No. 3 to Form 8-A filed by the Company with the SEC on March 26, 2012, the Amendment No. 4 to Form 8-A filed by the Company with the SEC on February 13, 2013, the Amendment No. 5 to Form 8-A filed by the Company with the SEC on May 20, 2013, the Amendment No. 6 to Form 8-A filed by the Company with the SEC on December 16, 2016, the Amendment No. 7 to Form 8-A filed by the Company with the SEC on December 21, 2016, the Amendment No. 8 to Form 8-A filed by the Company with the SEC on April 5, 2017 and the Amendment No. 9 to Form 8-A filed by the Company with the SEC on July 21, 2017.

Table of Contents

In addition, all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed in such forms that are related to such items unless such Form 8-K expressly provides to the contrary) subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date our offering is terminated or completed are deemed to be incorporated by reference into, and to be a part of, this prospectus supplement and the accompanying prospectus.

Any statement contained in this prospectus supplement and the accompanying prospectus, or any free writing prospectus provided in connection with this offering or in a document incorporated or deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus will be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement and the accompanying prospectus, or any free writing prospectus provided in connection with this offering or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus supplement and the accompanying prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Plug Power Inc., 968 Albany-Shaker Road, Latham, New York, 12110, Attention: General Counsel, or by telephone request to (518) 782-7700.

You should rely only on information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus or any free writing prospectus provided in connection with this offering. We have not authorized anyone to provide you with information different from that contained in this prospectus supplement and the accompanying prospectus or any free writing prospectus provided in connection with this offering or incorporated by reference in this prospectus supplement and the accompanying prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or to anyone to whom it is unlawful to make such offer or solicitation.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain and/or incorporate by reference statements that are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements contain projections of our future results of operations or of our financial position or state other forward-looking information. In some cases, you can identify these statements by forward-looking words such as "anticipate," "believe," "could," "continue," "estimate," "expect," "intend," "may," "should," "will," "would," "plan," "projected" or the negative of such words or other similar words or phrases. We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Investors are cautioned not to unduly rely on forward-looking statements because they involve risks and uncertainties, and actual results may differ materially from those discussed as a result of various factors, including, but not limited to: the risk that we continue to incur losses and anticipate continuing to incur losses; the risk that we will need to raise additional capital to fund our operations and such capital may not be available to us; our ability to obtain financing arrangements to support the sale or leasing of our products and services to customers; risk of our convertible debt securities that may be settled in cash, such as our Convertible Senior Notes, will have a material effect on our reported financial results; that our convertible note hedges may affect the value of the Convertible Senior Notes and our common stock; the volatility of the market price of our

Table of Contents

common stock; the risk that a loss of one or more of our major customers, or if one of our major customers delays payment of or is unable to pay their receivables, a material adverse effect could result on our financial condition; the cost and availability of fuel and fueling infrastructures for our products; the risk of delays in or not completing our product development goals; the risk of elimination of government subsidies and economic incentives for alternative energy products; the risk of potential losses related to any product liability claims or contract disputes; competitive factors, such as price competition and competition from other traditional and alternative energy companies; the cost and availability of components and parts for our products; possible new tariffs could have a material adverse effect on our business our ability to establish and maintain relationships with third parties with respect to product development, manufacturing, distribution and servicing and the supply of key product components; the risk that unit orders may not ship, be installed and/or converted to revenue, in whole or in part; the risk of dependency on information technology in our operations and the failure of such technology; the risks related to the use of flammable fuels in our products; our subjectivity to legal proceedings and legal compliance risks; our ability to protect our intellectual property; the risk that our lack of extensive experience in manufacturing and marketing products may impact our ability to manufacture and market products on a profitable and large-scale commercial basis; the risk of loss related to an inability to maintain an effective system of internal controls; our ability to attract and maintain key personnel; the risks associated with potential future acquisitions; the cost of complying with current and future federal, state and international governmental regulations; our provisions in our charter documents and Delaware law may discourage or delay an acquisition of the Company by a third party that stockholders may consider favorable and other risks and uncertainties referenced under "Risk Factors" of this prospectus supplement and in the accompanying prospectus or any free writing prospectus provided in connection with this offering and any documents incorporated by reference herein or therein. Readers should not place undue reliance on our forward-looking statements. These forward-looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake or intend to update any forward-looking statements after the date of this prospectus supplement or the respective dates of documents incorporated herein or therein or any free writing prospectus provided in connection with this offering that include forward-looking statements.

Table of Contents

SUMMARY

This summary highlights selected information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary may not contain all the information that you should consider before investing in our securities. You should read the entire prospectus supplement and the accompanying prospectus carefully, including "Risk Factors" contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein and the financial statements incorporated by reference in this prospectus supplement and the accompanying prospectus, before making an investment decision. This prospectus supplement may add to, update or change information in the accompanying prospectus.

Overview

We are a leading provider of alternative energy technology focused on the design, development, commercialization and manufacture of hydrogen and fuel cell systems used primarily for the material handling and stationary power markets.

We are focused on proton exchange membrane, or PEM, fuel cell and fuel processing technologies, fuel cell/battery hybrid technologies, and associated hydrogen storage and dispensing infrastructure from which multiple products are available. A fuel cell is an electrochemical device that combines hydrogen and oxygen to produce electricity and heat without combustion. Hydrogen is derived from hydrocarbon fuels such as liquid petroleum gas, or LPG, natural gas, propane, methanol, ethanol, gasoline or biofuels. Plug Power develops complete hydrogen generation, delivery, storage and refueling solutions for customer locations. Currently the Company obtains the majority of its hydrogen by purchasing it from fuel suppliers for resale to customers.

In our core business, we provide and continue to develop commercially-viable hydrogen and fuel cell product solutions to replace lead-acid batteries in electric material handling vehicles and industrial trucks for some of the world's largest distribution and manufacturing businesses. We are focusing our efforts on industrial mobility applications (electric forklifts and electric industrial vehicles) at multi-shift high volume manufacturing and high throughput distribution sites where our products and services provide a unique combination of productivity, flexibility and environmental benefits. Additionally, we manufacture and sell fuel cell products to replace batteries and diesel generators in stationary backup power applications. These products prove valuable with telecommunications, transportation and utility customers as robust, reliable and sustainable power solutions.

We were organized in the State of Delaware on June 27, 1997.

Our principal executive offices are located at 968 Albany-Shaker Road, Latham, New York, 12110, and our telephone number is (518) 782-7700. Our corporate website address is www.plugpower.com. The information on our website is not part of this prospectus supplement or the accompanying prospectus.

Table of Contents

THE OFFERING

Common stock offered by us	10,000,000 shares.
Common stock outstanding following the offering	243,555,904 shares
Use of proceeds	We estimate that the net proceeds from this offering will be approximately \$23.5 million after deducting offering expenses. We intend to use the net proceeds from this offering for working capital and other general corporate purposes, including capital expenditures. See "Use of Proceeds."
NASDAQ Capital Market Symbol	PLUG
Risk factors	Investing in our securities involves risks. See "Risk Factors" beginning on page S-12 of this prospectus supplement and other information included or incorporated into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to invest in our securities.

The number of shares of our common stock to be outstanding after the offering is based on 233,555,904 shares of common stock outstanding as of December 31, 2018 and excludes:

21,957,150 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2018, at a weighted average exercise price of \$2.51 per share;

2,314,830 shares of our common stock reserved for future issuance under our equity incentive plans as of December 31, 2018;

604,757 shares of common stock in treasury;

2,347,347 shares of common stock issuable upon the vesting of restricted stock units;

15,151,516 shares of common stock issuable upon conversion of our Series E Redeemable Convertible Preferred Stock at a conversion price of \$2.31 per share;

2,782,075 shares of common stock issuable upon conversion of our Series C Redeemable Convertible Preferred Stock at a conversion price of \$0.2343 per share;

43,630,020 shares of common stock issuable upon conversion of our 5.5% Convertible Senior Notes due on March 15, 2023 ("Convertible Senior Notes") at a conversion price of \$2.29 per share; and

115,824,142 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2018.

Except as otherwise indicated, all information in this prospectus supplement is as December 31, 2018.

Table of Contents

SUMMARY SELECTED CONSOLIDATED FINANCIAL DATA

The following tables set forth selected financial data and other operating information of the Company. The selected statements of operations and balance sheet data as of, and for the years ended, December 31, 2018, 2017, 2016, 2015 and 2014 as set forth below are derived from our audited consolidated financial statements certain of which are incorporated by reference into the accompanying prospectus from our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 13, 2019 (the "Annual Report"), and incorporated by reference herein. Our historical results are not necessarily indicative of the results that may be expected in the future, and our interim period results are not necessarily indicative of results to be expected for a full year or any other interim period. The information is only a summary and you should read it in conjunction with our audited consolidated financial statements, including the related notes, and other financial information and "Management's Discussion and Analysis of Financial Condition and Results of

S-9

Edgar Filing: PLUG POWER INC - Form 424B5

Table of Contents

Operations" incorporated by reference into this prospectus supplement and the accompanying prospectus from our Annual Report.

	Year ended December 31,				
	2018	2017	2016	2015	2014
(in thousands, except share and per share data)					
Statements Of Operations:					
Revenue(1):					
Sales of fuel cell systems and related infrastructure	107,292	62,631	39,985	78,002	48,306
Services performed on fuel cell systems and related infrastructure(2)	22,002	16,202	17,347	13,204	9,909
Power Purchase Agreements	22,869	12,869	13,687	5,718	2,137
Fuel delivered to customers	22,469	8,167	10,916	5,075	1,959
Other		284	884	481	1,919
Total revenue	174,632	100,153	82,819	102,480	64,230
Cost of revenue:					
Sales of fuel cell systems and related infrastructure	84,439	54,815	29,543	67,703	43,378
Services performed on fuel cell systems and related infrastructure	23,698	19,814	19,071	21,717	19,256
Provision for loss contracts related to service			(1,071)	10,050	
Power Purchase Agreements	36,161	31,292	16,601	5,665	1,052
Fuel delivered to customers	27,712	22,013	13,864	6,695	2,204
Other		308	865	540	3,202
Total cost of revenue	172,010	128,242	78,873	112,370	69,092
Gross margin (loss)	2,622	(28,089)	3,946	(9,890)	(4,862)
Research and development expense	33,907	28,693	21,177	14,948	6,469
Selling, general and administrative expenses	38,198	45,010	34,288	34,164	26,601
Other (expense) income, net	(17,849)	(25,288)	(6,360)	3,312	(50,881)
Loss before income taxes	(87,332)	(127,080)	(57,879)	(55,690)	(88,813)
Income tax benefit	9,217		392		325
Net loss attributable to the Company	(78,115)	(127,080)	(57,487)	(55,690)	(88,488)
Preferred stock dividends declared and accretion of discount	(52)	(3,098)	(104)	(105)	(156)
Net loss attributable to common shareholders	(78,167)	(130,178)	(57,591)	(55,795)	(88,644)
Loss per share, basic and diluted	(0.36)	(0.60)	(0.32)	(0.32)	(0.56)
Weighted average number of common shares outstanding	218,882,337	216,343,985	180,619,860	176,067,231	159,228,815
Balance Sheet Data:					
<i>(at end of the period)</i>					
Unrestricted cash and cash equivalents	38,602	24,828	46,014	63,961	146,205
Total Assets	390,326	270,810	240,832	209,456	204,151
Noncurrent liabilities(3)	209,600	80,734	79,637	40,861	19,008
Stockholders' equity	2,713	73,646	85,088	124,736	158,283
Working capital	9,245	3,886	44,448	88,524	167,039

(1) Revenue amounts reported in prior periods have been reclassified to be presented net of provision for common stock warrants, as referenced in Note 2, Summary of Significant Accounting Policies to the Consolidated Financial Statements in our Annual Report.

(2) Presentation of certain service arrangements and the amortization of the associated finance obligations has been corrected in the 2017, 2016 and 2015 selected financial data. See Note 2,

Table of Contents

Summary of Significant Accounting Policies to the Consolidated Financial Statements in our Annual Report.

(3)

Effective January 1, 2018, the Company early adopted ASC Topic 842, Leases (ASC Topic 842). The most significant impact was the recognition of right of use assets and finance obligations for operating leases on the consolidated balance sheet, as well as recognition of gross profit on sale/leaseback transactions. See Note 2, Summary of Significant Accounting Policies to the Consolidated Financial Statements in our Annual Report.

S-11

Table of Contents

RISK FACTORS

Investing in our securities involves a high degree of risk. In addition to the other information contained in this prospectus supplement to the accompanying prospectus and in the documents we incorporate by reference, you should carefully consider the risks discussed below and under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on March 13, 2019 before making a decision about investing in our securities. The risks and uncertainties discussed below and in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 are not the only ones facing us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. If any of these risks occur, our business, financial condition and operating results could be harmed, the trading price of our common stock could decline and you could lose part or all of your investment.

Risks Related to this Offering and Our Common Stock

We may require additional capital funding and such capital may not be available to us.

On December 31, 2018, we had cash and cash equivalents of \$38.6 million, restricted cash of \$71.6 million and net working capital of \$9.2 million. This compares to \$24.8 million, \$43.2 million and \$3.9 million, respectively, on December 31, 2017. Restricted cash becomes available to us as we perform in accordance with the related leasing agreements.

Our cash requirements relate primarily to working capital needed to operate and grow our business, including funding operating expenses, growth in inventory to support both shipments of new units and servicing the installed base, growth in equipment leased to customers under long-term arrangements, funding the growth in our GenKey "turn-key" solution, which includes the installation of our customers' hydrogen infrastructure as well as delivery of the hydrogen fuel, continued expansion of our markets, such as Europe and China, continued development and expansion of our products, such as Pro Gen, payment of lease obligations under sale/leaseback financings, and the repayment or refinancing of our long-term debt. Our ability to achieve profitability and meet future liquidity needs and capital requirements will depend upon numerous factors, including the timing and quantity of product orders and shipments; attaining and expanding positive gross margins across all product lines; the timing and amount of our operating expenses; the timing and costs of working capital needs; the timing and costs of building a sales base; the ability of our customers to obtain financing to support commercial transactions; our ability to obtain financing arrangements to support the sale or leasing of our products and services to customers, including financing arrangements to repay or refinance our long-term debt, our ability to negotiate any refinancing of our current liabilities with our lenders, and the terms of such agreements that may require us to pledge or restrict substantial amounts of our cash to support these financing arrangements; the timing and costs of developing marketing and distribution channels; the timing and costs of product service requirements; the timing and costs of hiring and training product staff; the extent to which our products gain market acceptance; the timing and costs of product development and introductions; the extent of our ongoing and new research and development programs; and changes in our strategy or our planned activities. If we are unable to fund our operations with positive cash flows and cannot obtain external financing, we may not be able to sustain future operations. As a result, we may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection.

We cannot assure you that any necessary additional financing will be available on terms favorable to us, or at all. We believe that it could be difficult to raise additional funds and there can be no assurance as to the availability of additional financing or the terms upon which additional financing may be available. Additionally, even if we raise sufficient capital through additional equity or debt financings, strategic alternatives or otherwise, there can be no assurance that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or

Table of Contents

generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our existing stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. If we are able to refinance our indebtedness, there can be no assurance that the refinanced terms will be attractive to us. The terms of any debt securities issued, including those that we may be able to refinance, could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies or grant licenses on terms that are not favorable to us.

We may not have the cash necessary to redeem the Series E Convertible Preferred Stock.

We have the obligation to make monthly redemption payments on the Series E convertible preferred stock in the Preferred Offering commencing May 1, 2019, which mandatory redemption payments may each be made at our option in cash or in 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 Capital Market or another permitted exchange (as described in more detail below), and our stock maintaining certain minimum average trading volumes during the applicable measurement period. If we cannot satisfy the equity conditions, we will not be able to make our monthly mandatory redemption payments in stock, and we would be forced to make such monthly 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.

Any failure to pay any amounts due to the holders of the Series E convertible preferred stock, 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 E convertible preferred stock, and breaches of certain representations, warranties and covenants that are not timely cured, where a cure period is permitted, would permit the holders of our preferred shares to compel our redemption of such Series E convertible preferred stock in cash at a price per share equal to the greater of (i) 125% of the stated value of the Series E convertible preferred stock being redeemed and accrued dividends and (ii) the market value of the number of shares into which the Series E convertible preferred stock, plus accrued dividends, could be converted by the holder at the time a notice of redemption is delivered by the holder, 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. If we are delisted from The NASDAQ Capital Market, without obtaining a listing on another national securities exchange, it would constitute a "triggering event" under the certificate of designations. Thus, if we are delisted from The NASDAQ Capital Market, or if for any other reason we are required to repurchase the Series E convertible preferred stock 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 and financial condition and may impair our ability to continue in business as a going concern.

The Series E convertible preferred stock and the Series C Preferred Stock are senior obligations of ours, and rank prior to our common stock with respect to dividends, distributions and payments upon liquidation.

The rights of the holders of the Series E convertible preferred stock and the Series C Preferred Stock (together, the "Senior Preferred Stock") rank senior to the obligations to our common stock

Table of Contents

holders. Upon our liquidation, the holders of Series E convertible preferred stock are entitled to receive an amount per share of Series E convertible preferred stock equal to the greater of (A) 125% of the conversion amount thereof on the date of such payment and (B) the amount per share such Holder would receive if such Holder converted such Series E convertible preferred stock into Common Stock immediately prior to the date of such payment. Further, the holders of Series E convertible preferred stock 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 shares of Series E convertible preferred stock. The existence of senior securities could have an adverse effect on the value of our common stock.

Holders of the Series E convertible preferred stock have rights that may restrict our ability to operate our business.

Under the certificate of designations establishing the terms of the Series E convertible preferred stock, we are subject to certain covenants that limit our ability to create new series of preferred stock, other than series junior to the Series E convertible preferred stock. Such restrictions may have an adverse effect on our ability to operate our business while the shares of Series E convertible preferred stock are outstanding.

Our stockholders will experience significant dilution upon the issuance of common stock upon conversion or redemption payments under the Series E convertible preferred stock, and if the shares of our common stock underlying our warrants are exercised or converted.

The issuance of common stock as mandatory redemption payments or upon conversion of some or all of the Series E convertible preferred stock (whether by us or by the holders) will dilute the ownership interests of our existing holders of our shares of common stock. If the initial aggregate stated value of the Series E convertible preferred stock is converted into our common stock at its initial conversion price, we would issue 15,151,516 shares of common stock upon their conversion. This excludes the effect of any exercise of the warrants issued in this offering, and it excludes the effect of any common stock we may issue as dividends or as conversion shares, in lieu of paying monthly redemption amounts in cash, which may be made at a price lower than the initial conversion price. The initial conversion price of the Series E convertible preferred stock is adjustable based on certain events, including if we voluntarily reduce the conversion price. Our Series E convertible preferred stock will also be adjusted if we effect a stock split or combination or similar transaction, to reflect the proportionate (adjusted) trading prices of our common stock before and after the effective date.

In addition, we have a significant number of securities convertible into, or allowing the purchase of, our common stock. Investors could be subject to increased dilution upon the conversion or exercise of these securities. Also, the issuance of additional shares as a result of such conversion or purchase, or their subsequent sale, could adversely affect the price of our common stock.

Our stock price and stock trading volume have been and could remain volatile.

The market price of our common stock has historically experienced and may continue to experience significant volatility. In 2018, the sales price of our common stock fluctuated from a high of \$2.16 per share to a low of \$1.02 per share. Our progress in developing and commercializing our products, our quarterly operating results, announcements of new products by us or our competitors, our perceived prospects, changes in securities analysts' recommendations or earnings estimates, changes in general conditions in the economy or the financial markets, adverse events related to our strategic relationships, significant sales of our common stock by existing stockholders, including one or more of our strategic partners, and other developments affecting us or our competitors could cause the market price of our common stock to fluctuate substantially. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. This volatility has affected the market prices of

Table of Contents

securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. Such market price volatility could adversely affect our ability to raise additional capital. In addition, we may be subject to securities class action litigation as a result of volatility in the price of our common stock, which 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.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the market perception that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

Additionally, market conditions may result in volatility in the level of, and fluctuations in, the market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance.

Future sales of a significant number of shares of our common stock or other dilution of our equity could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. We are not restricted from issuing additional shares of our common stock, including any securities that are convertible into or exchangeable for, or that represent the right to receive, our common stock. The market price of our common stock could decline as a result of sales of shares of our common stock or sales of such other securities made after this offering or the perception that such sales could occur.

If securities or industry analysts do not publish, or cease publishing, research or reports about us, our business or our market, or if they change their recommendations regarding our stock adversely, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of these analysts who may cover us change their recommendation regarding our stock adversely, or provide more favorable relative recommendations about our competitors, our stock price would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Our management will have broad discretion in the use of the net proceeds we receive in this offering and might not apply the proceeds in ways that increase the value of your investment.

Our management will have broad discretion over the use of our net proceeds from this offering, and you will be relying on the judgment of our management regarding the application of these proceeds. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment and we might not be able to yield a significant return, if any, on any investment of these net proceeds. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our products and cause the price of our common stock to decline.

Investors in this offering will experience immediate and substantial dilution.

The price of the securities offered pursuant to this prospectus supplement is substantially higher than the net tangible book value per share of our common stock. Therefore, if you purchase shares of common stock in this offering, you will incur immediate and substantial dilution in the pro forma net

Table of Contents

tangible book value per share of common stock from the price per share that you pay for the common stock. If the holders of outstanding options or warrants exercise those options or warrants at prices below the public offering price, you will incur further dilution. See the section entitled "Dilution" below for a more detailed discussion of the dilution associated with this offering.

We have not paid cash dividends to our shareholders and currently have no plans to pay future cash dividends.

We plan to retain earnings to finance future growth and have no current plans to pay cash dividends to shareholders (except in accordance with the terms of our outstanding Series C Preferred Stock). Because we have not paid cash dividends, holders of our securities will experience a gain on their investment in our securities only in the case of an appreciation of value of our securities. You should neither expect to receive dividend income from investing in our securities nor an appreciation in value.

Provisions in our charter documents and Delaware law may discourage or delay an acquisition that stockholders may consider favorable, which could decrease the value of our common stock.

Our certificate of incorporation, our bylaws, and Delaware corporate law contain provisions that could make it harder for a third party to acquire us without the consent of our board of directors. These provisions include those that: authorize the issuance of up to 5,000,000 shares of preferred stock in one or more series without a stockholder vote; limit stockholders' ability to call special meetings; establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted on by stockholders at stockholder meetings; and provide for staggered terms for our directors. We have a shareholders rights plan that may be triggered if a person or group of affiliated or associated persons acquires beneficial ownership of 15% or more of the outstanding shares of our common stock. In addition, in certain circumstances, Delaware law also imposes restrictions on mergers and other business combinations between us and any holder of 15% or more of our outstanding common stock.

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 over financial reporting 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 the design and operating effectiveness of our controls over financial reporting. We are currently required to have our auditors attest to the effectiveness of our internal control over financial reporting. Our compliance with the annual internal control report requirement will depend on the effectiveness of our financial reporting and data systems and controls. Inferior internal controls increase the possibility of errors and 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.

In addition, our internal control systems rely on people trained in the execution of the controls. Loss of these people or our inability to replace them with similarly skilled and trained individuals or new processes in a timely manner could adversely impact our internal control mechanisms.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified board members and officers.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934 (the "Exchange Act"), the listing requirements of the NASDAQ Capital Market and other

Table of Contents

applicable securities rules and regulations. Compliance with these rules and regulations increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results and maintain effective disclosure controls and procedures and internal control over financial reporting. To maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this requirement, significant resources and management oversight may be necessary.

Changes in tax law could adversely affect our business and financial condition.

The rules dealing with U.S. federal, state, and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many such changes have been made and changes are likely to continue to occur in the future. For example, the Tax Cuts and Jobs Act, or the TCJA, was enacted in 2017 and significantly reformed the Internal Revenue Code of 1986, as amended, or the Code. The TCJA, among other things, contains significant changes to corporate taxation, including reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, limitation of the tax deduction for net interest expense to 30% of adjusted earnings (except for certain small businesses), limitation of the deduction for net operating losses to 80% of current year taxable income and elimination of net operating loss carrybacks, in each case, for losses generated after December 31, 2017 (though any such net operating losses may be carried forward indefinitely), and the modification or repeal of many business deductions and credits. Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations. We urge investors to consult with their legal and tax advisers regarding the implications of the TCJA and other changes in tax laws on an investment in our common stock.

Table of Contents

USE OF PROCEEDS

We expect to receive approximately \$23.5 million in net proceeds from this offering. "Net proceeds" is what we expect to receive after paying the expenses of this offering which include legal, accounting and printing fees.

We intend to use the net proceeds from this offering for working capital and other general corporate purposes, including capital expenditures. Until we use the net proceeds of this offering, we intend to invest the funds in short-term, investment grade, interest-bearing securities.

S-18

Table of Contents**DILUTION**

If you invest in our common stock, your ownership interest will be diluted by the difference between the price per share you pay and the net tangible book value per share of our common stock immediately after this offering.

Our net tangible book value as of December 31, 2018, was approximately \$48.9 million, or \$0.21 per share of our common stock, based upon 233,555,904 shares of our common stock outstanding as of that date. Net tangible book value per share is determined by dividing our total tangible assets, less total liabilities, by the number of shares of our common stock outstanding as of December 31, 2018. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of our common stock immediately after this offering.

After giving effect to the sale of 10,000,000 shares of our common stock in this offering at the price of \$2.35 per share and after deducting the estimated offering expenses payable by us, our as adjusted net tangible book value as of December 31, 2018, would have been approximately \$72.4 million, or \$0.30 per share. This represents an immediate increase in net tangible book value of \$0.09 per share to existing stockholders and immediate dilution in net tangible book value of \$2.05 per share to new investors. The following table illustrates this dilution on a per share basis:

Offering price per share	\$ 2.35
Net tangible book value per share as of December 31, 2018	\$ 0.21
Increase in net tangible book value per share attributable to this offering	\$ 0.09
Adjusted net tangible book value per share as of December 31, 2018 after giving effect to this offering	\$ 0.30
Dilution in net tangible book value per share to new investors	\$ 2.05

The foregoing table and discussion are based on 233,555,904 shares of common stock outstanding as of December 31, 2018 and excludes:

21,957,150 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2018, at a weighted average exercise price of \$2.51 per share;

2,314,830 shares of our common stock reserved for future issuance under our equity incentive plans as of December 31, 2018;

604,757 shares of common stock in treasury;

2,347,347 shares of common stock issuable upon the vesting of restricted stock units;

15,151,516 shares of common stock issuable upon conversion of our Series E Redeemable Convertible Preferred Stock at a conversion price of \$2.31 per share;

2,782,075 shares of common stock issuable upon conversion of our Series C Redeemable Convertible Preferred Stock at a conversion price of \$0.2343 per share;

43,630,020 shares of common stock issuable upon conversion of our Convertible Senior Notes at a conversion price of \$2.29 per share; and

115,824,142 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2018.

To the extent that outstanding options or warrants are exercised, you may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these

securities could result in further dilution to our stockholders.

S-19

Table of Contents

MARKET INFORMATION FOR COMMON STOCK

Our common stock is traded on the NASDAQ Capital Market under the symbol "PLUG." As of March 8, 2019, there were approximately 701 record holders of our common stock. However, management believes that a significant number of shares are held by brokers under a "nominee name" and that the number of beneficial shareholders of our common stock exceeds 92,193.

S-20

Table of Contents

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. Any future determination as to the payment of dividends will depend upon capital requirements and limitations imposed by our credit agreements, if any, and such other factors as our board of directors may consider.

S-21

Table of Contents**CAPITALIZATION**

The following table sets forth our unaudited cash and cash equivalents and capitalization as of December 31, 2018:

on an actual basis;

on an as-adjusted basis to give effect to our sale in this offering of 10,000,000 shares of common stock at a purchase price of \$2.35 per share and after deducting estimated offering expenses payable by us.

You should read this table in conjunction with "Use of Proceeds" as well as our "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, including the related notes, from our annual report on Form 10-K for the fiscal year ended December 31, 2018 incorporated by reference herein.

	As of December 31, 2018	
	Actual	As Adjusted
	(unaudited)	
	(in thousands, except share	
	and per share data)	
Unrestricted cash and cash equivalents(1)	\$ 38,602	\$ 62,052
Redeemable preferred stock:		
Series C redeemable convertible preferred stock, \$0.01 par value per share (aggregate involuntary liquidation preference \$16,664); 10,431 shares authorized; Issued and outstanding actual: 2,620 at December 31, 2018 and 2017	\$ 709	\$ 709
Series E redeemable convertible preferred stock, \$0.01 par value per share (aggregate involuntary liquidation preference \$35,000 at December 31, 2018 and none at December 31, 2017); Shares authorized: 35,000 at December 31, 2018 and none at December 31, 2017; Issued and outstanding actual: 35,000 at December 31, 2018 and none at December 31, 2017	\$ 30,934	\$ 30,934
Stockholders' equity:		
Common Stock, par value \$0.01; 750,000,000 shares authorized; 234,160,661 shares issued and 233,555,904 outstanding, actual; 244,160,661 shares issued and 243,555,904 outstanding, as adjusted	\$ 2,342	\$ 2,442
Additional paid-in capital	\$ 1,289,714	\$ 1,313,064
Accumulated other comprehensive income	\$ 1,584	\$ 1,584
Accumulated deficit	\$ (1,260,290)	\$ (1,260,290)
Less common stock in treasury 604,757 shares(2)	\$ (3,137)	\$ (3,137)
Total stockholders' equity	\$ 30,213	\$ 53,663
Total capitalization	\$ 334,379	\$ 357,829

(1) Total capitalization represents the sum of total stockholders' equity, redeemable preferred stock, long-term debt, convertible senior notes, net and finance obligations.

(2) Common stock in treasury excludes 14,397,906 shares associated with the purchase of a common stock forward for \$27.5 million. The shares associated with the purchase of a common stock forward are classified as common stock in treasury under generally accepted accounting principles, and are reported as such in the Consolidated Financial Statements in our Annual Report.

Edgar Filing: PLUG POWER INC - Form 424B5

Table of Contents

The foregoing table and discussion are based on 233,555,904 shares of common stock outstanding as of December 31, 2018 and excludes:

21,957,150 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2018, at a weighted average exercise price of \$2.51 per share;

2,314,830 shares of our common stock reserved for future issuance under our equity incentive plans as of December 31, 2018;

604,757 shares of common stock in treasury;

2,347,347 shares of common stock issuable upon the vesting of restricted stock units;

15,151,516 shares of common stock issuable upon conversion of our Series E Redeemable Convertible Preferred Stock at a conversion price of \$2.31 per share;

2,782,075 shares of common stock issuable upon conversion of our Series C Redeemable Convertible Preferred Stock at a conversion price of \$0.2343 per share;

43,630,020 shares of common stock issuable upon conversion of our Convertible Senior Notes at a conversion price of \$2.29 per share; and

115,824,142 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2018.

Table of Contents

PLAN OF DISTRIBUTION

We have arranged for the sale of the common stock we are offering pursuant to this prospectus supplement and the accompanying prospectus to the investors through a securities purchase agreement directly between the investors and us. The shares were offered directly to the investors without a placement agent, underwriter, broker or dealer. All of the common stock sold in this offering will be sold at the same price and we expect a single closing. It is possible that not all of the shares we are offering pursuant to this prospectus supplement will be sold at the closing, in which case our net proceeds would be reduced. We expect that the sale of the shares will be completed on or around the date indicated on the cover page of this prospectus supplement.

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.

For the complete terms of the securities purchase agreement, you should refer to the form securities purchase agreement which will be filed as an exhibit to the Current Report on Form 8-K to be filed with the U.S. Securities and Exchange Commission in connection with this offering and which is incorporated by reference into the registration statement of which this prospectus supplement is part.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares of our common stock may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the underwriter for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or the underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

Table of Contents

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following discussion is a summary of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

a non-resident alien individual;

a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or

a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, which we refer to as the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any U.S. state, local or non-U.S. taxes, the alternative minimum tax, the Medicare tax on net investment income, the rules regarding qualified small business stock within the meaning of Section 1202 of the Code, or any other aspect of any U.S. federal tax other than the income tax. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

insurance companies;

tax-exempt or governmental organizations;

financial institutions;

brokers or dealers in securities;

regulated investment companies;

pension plans;

"controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;

"qualified foreign pension funds," or entities wholly owned by a "qualified foreign pension fund";

S-25

Table of Contents

persons deemed to sell our common stock under the constructive sale provisions of the Code;

persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment; and

certain U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder's investment, up to such holder's tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in "Gain on Sale or Other Taxable Disposition of Our Common Stock." Any such distributions will also be subject to the discussions below under the sections titled "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements FATCA."

Subject to the discussion in the following two paragraphs in this section, dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) to the applicable withholding agent and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale or Other Taxable Disposition of Our Common Stock

Subject to the discussions below under "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements FATCA," a non-U.S. holder generally will not

Table of Contents

be subject to any U.S. federal income tax on any gain realized upon such holder's sale or other taxable disposition of shares of our common stock unless:

the gain is effectively connected with the non-U.S. holder's conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;

the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or

we are, or have been, at any time during the five-year period preceding such sale or other taxable disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation," unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker.

Table of Contents

Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements FATCA

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, generally impose a U.S. federal withholding tax at a rate of 30% on payments of dividends on our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Such withholding may also apply to gross proceeds from the sale or other disposition of our common stock, although under recently proposed U.S. Treasury Regulations, no withholding would apply to such gross proceeds. The preamble to the proposed regulations specifies that taxpayers (including withholding agents) are permitted to rely on the proposed regulations pending finalization.. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

Table of Contents

LEGAL MATTERS

Certain legal matters with respect to the securities offered by this prospectus supplement will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of Plug Power Inc. and subsidiaries as of December 31, 2018 and 2017, and for each of the years in the three-year period ended December 31, 2018, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2018 have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

S-29

PROSPECTUS

PLUG POWER INC.

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

From time to time, we may offer up to \$200,000,000 of any combination of the securities described in this prospectus, either individually or in units. The warrants and debt securities may be convertible into or exercisable or exchangeable for common stock or preferred stock and the preferred stock may be convertible into or exchangeable for common stock.

Each time we offer securities, we will provide the specific terms of the securities offered in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

The securities offered by this prospectus may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers on a continuous or delayed basis. We will set forth the names of any underwriters or agents and any applicable fees, commissions, discounts and over-allotments in an accompanying prospectus supplement. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is traded on the NASDAQ Capital Market under the symbol "PLUG." On November 17, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$1.51. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Capital Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD REVIEW CAREFULLY THE RISKS AND UNCERTAINTIES REFERENCED UNDER THE HEADING "RISK FACTORS" ON PAGE 6 OF THIS PROSPECTUS AS WELL AS THOSE CONTAINED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND ANY RELATED FREE WRITING PROSPECTUS, AND IN THE OTHER DOCUMENTS THAT ARE INCORPORATED BY REFERENCE INTO THIS PROSPECTUS OR THE APPLICABLE PROSPECTUS SUPPLEMENT.

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

The date of this prospectus is December 9, 2016.

TABLE OF CONTENTS

	Page
ABOUT THIS PROSPECTUS	1
SUMMARY	2
RISK FACTORS	6
FORWARD-LOOKING STATEMENTS	6
RATIO OF COMBINED FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS	8
USE OF PROCEEDS	8
PLAN OF DISTRIBUTION	8
DESCRIPTION OF CAPITAL STOCK	11
DESCRIPTION OF WARRANTS	18
DESCRIPTION OF OUR DEBT SECURITIES	21
DESCRIPTION OF UNITS	28
LEGAL MATTERS	29
EXPERTS	29
WHERE YOU CAN FIND ADDITIONAL INFORMATION	29
INCORPORATION OF CERTAIN INFORMATION BY REFERENCE	30

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, utilizing a "shelf" registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of warrants to purchase common stock or preferred stock and debt securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$200,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the specific terms of the offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. Each such prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) may also add, update or change information contained in this prospectus or in documents incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the headings "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference" before buying any of the securities being offered.

This prospectus may not be used to offer or sell securities unless it is accompanied by a prospectus supplement.

You should rely only on the information contained or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus. We have not authorized anyone to provide you with different information in addition to or different from that contained in this prospectus, any applicable prospectus supplement and any related free writing prospectus. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find Additional Information."

SUMMARY

This summary highlights selected information from this prospectus or incorporated by reference in this prospectus, and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities referred to under the heading "Risk Factors" in this prospectus and contained in the applicable prospectus supplement and any related free writing prospectus, and in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part.

Unless otherwise mentioned or unless the context requires otherwise, throughout this prospectus, any applicable prospectus supplement and any related free writing prospectus, the words "Plug Power," "we," "us," "our," the "Company" or similar references refer to Plug Power Inc. and its subsidiaries; and the term "securities" refers collectively to our common stock, preferred stock, warrants to purchase common stock or preferred stock, debt securities, or any combination of the foregoing securities.

This prospectus and the information incorporated herein by reference includes trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

Our Company

We are a leading provider of alternative energy technology focused on the design, development, commercialization and manufacture of hydrogen fuel cell systems used primarily for the material handling and stationary power market.

We are focused on proton exchange membrane, or PEM, fuel cell and fuel processing technologies, fuel cell/battery hybrid technologies, and associated hydrogen storage and dispensing infrastructure from which multiple products are available. A fuel cell is an electrochemical device that combines hydrogen and oxygen to produce electricity and heat without combustion. Hydrogen is derived from hydrocarbon fuels such as liquid petroleum gas, or LPG, natural gas, propane, methanol, ethanol, gasoline or biofuels. Plug Power develops complete hydrogen delivery, storage and refueling solutions for customer locations. Hydrogen can also be obtained from the electrolysis of water, or produced on-site at consumer locations through a process known as reformation. Currently we obtain hydrogen by purchasing it from fuel suppliers for resale to customers.

We provide and continue to develop fuel cell product solutions to replace lead-acid batteries in material handling vehicles and industrial trucks for some of the world's largest distribution and manufacturing businesses. We are focusing our efforts on material handling applications (forklifts) at multi-shift high volume manufacturing and high throughput distribution sites where our products and services provide a unique combination of productivity, flexibility and environmental benefits. Our current product line includes: GenDrive, our hydrogen fueled PEM fuel cell system providing power to material handling vehicles; GenFuel, our hydrogen fueling delivery system; GenCare, our ongoing maintenance program for both the GenDrive fuel cells and GenFuel products; GenSure (formerly ReliOn), our stationary fuel cell solution providing scalable, modular PEM fuel cell power to support the backup and grid-support power requirements of the telecommunications, transportation, and utility sectors; GenKey, our turn-key solution combining either GenDrive or GenSure with GenFuel and GenCare, offering complete simplicity to customers transitioning to fuel cell power; and GenFund, a collaboration with leasing organizations to provide cost efficient and seamless financing solutions to customers.

We provide our products worldwide through our direct product sales force, and by leveraging relationships with original equipment manufacturers, or OEMs, and their dealer networks. Our subsidiary based in France, HyPulsion S.A.S., or HyPulsion France, develops and sells hydrogen fuel cell systems for the European material handling market.

We were organized in the State of Delaware on June 27, 1997. Our principal executive offices are located at 968 Albany-Shaker Road, Latham, New York, 12110, and our telephone number is (518) 782-7700. Our corporate website address is www.plugpower.com. Information on our website is not deemed to be a part of this prospectus or any applicable prospectus supplement. Our common stock trades on the NASDAQ Capital Market under the symbol "PLUG."

The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of warrants to purchase common stock or preferred stock and debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt, either individually or in units, with a total value of up to \$200,000,000 from time to time in one or more offerings under this prospectus at prices and on terms to be determined at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement and/or free writing prospectus that will describe the specific amounts, prices and other important terms of the securities.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part or any amendment thereto.

This prospectus may not be used to offer or sell securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents or underwriters, we will include in the applicable prospectus supplement:

the names of those agents or underwriters;

applicable fees, discounts and commissions to be paid to them;

details regarding over-allotment options or options to purchase additional securities, if any; and

the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Holders of shares of our common stock are entitled to one vote for each share held of record on all matters to be voted on by stockholders and do not have cumulative voting rights. Subject to the preferences that may be applicable to any then outstanding preferred stock, the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the rights, preferences and privileges of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. Convertible preferred stock will be convertible into our common stock or exchangeable for other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the rights, preferences and privileges of the preferred stock of such series, as well as any qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Warrants. We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. Forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

Debt Securities. We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus supplement and any free writing prospectus that we may authorize to be provided to you related to the particular series of debt securities being offered, as well as the complete indenture that contains the terms of the debt securities. We will file as exhibits to the registration statement of which this prospectus is a part, the form of indenture and any supplemental agreements that describe the terms of the series of debt securities we are offering before the issuance of the related series of debt securities.

We may evidence each series of debt securities by indentures we will issue. Debt securities may be issued under an indenture that we enter into with a trustee. We will indicate the name and address of the trustee, if applicable, in the prospectus supplement relating to the particular series of debt securities being offered.

Units. We may issue, in one or more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock and/or preferred stock in any combination. In this prospectus, we have summarized certain general features of the units. We urge

Edgar Filing: PLUG POWER INC - Form 424B5

you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

We will evidence each series of units by unit certificates that we will issue. Units may be issued under a unit agreement that we enter into with a unit agent. We will indicate the name and address of the unit agent, if applicable, in the prospectus supplement relating to the particular series of units being offered.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before purchasing our securities, you should carefully consider the risks and uncertainties set forth under the heading "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 14, 2016, our quarterly reports on Form 10-Q for the quarters ended March 31, 2015, June 30, 2015 and September 30, 2016, filed on May 10, 2016, August 9, 2016 and November 8, 2016, respectively, which are incorporated by reference in this prospectus, as well as any updates thereto contained in subsequent filings with the SEC or any applicable prospectus supplement or free writing prospectus. If any of these risks were to occur, our business, financial condition or results of operations would likely suffer. In that event, the value of our securities could decline, and you could lose all or part of your investment. The risks and uncertainties we describe are not the only ones facing us. Additional risks not presently known to us or that we currently deem immaterial may also impair our business operations, the market price of our securities or the value of your investment.

FORWARD-LOOKING STATEMENTS

This prospectus contains statements that are not historical facts and are considered forward-looking within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements contain projections of our future results of operations or of our financial position or state other forward-looking information. In some cases you can identify these statements by forward-looking words such as "anticipate," "believe," "could," "continue," "estimate," "expect," "intend," "may," "should," "will," "would," "plan," "projected" or the negative of such words or other similar words or phrases. We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Investors are cautioned not to unduly rely on forward-looking statements because they involve risks and uncertainties, and actual results may differ materially from those discussed as a result of various factors, including, but not limited to: the risk that we continue to incur losses and might never achieve or maintain profitability; the risk that we will need to raise additional capital to fund our operations and such capital may not be available to us; the risk of dilution to our stockholders and/or stock price should we need to raise additional capital; the risk that our lack of extensive experience in manufacturing and marketing products may impact our ability to manufacture and market products on a profitable and large-scale commercial basis; the risk that unit orders will not ship, be installed and/or converted to revenue, in whole or in part; the risk that a loss of one or more of our major customers could result in a material adverse effect on our financial condition; the risk that a sale of a significant number of shares of stock could depress the market price of our common stock; the risk that negative publicity related to our business or stock could result in a negative impact on our stock value and profitability; the risk of potential losses related to any product liability claims or contract disputes; the risk of loss related to an inability to maintain an effective system of internal controls; our ability to attract and maintain key personnel; the risks related to the use of flammable fuels in our products; the risk that pending orders may not convert to purchase orders, in whole or in part; the cost and timing of developing, marketing and selling our products and our ability to raise the necessary capital to fund such costs; our ability to obtain financing arrangements to support the sale or leasing of our products and services to customers; the ability to achieve the forecasted gross margin on the sale of our products; the cost and availability of fuel and fueling infrastructures for our products; the risk of elimination of government subsidies and economic incentives for alternative energy products; market acceptance of our products and services, including GenDrive units; our ability to establish and maintain relationships with third parties with respect to product development, manufacturing, distribution and servicing and the supply of key product components; the cost and availability of components and parts for our products; our ability to develop commercially viable products; our ability to reduce product and manufacturing costs; our ability to

Edgar Filing: PLUG POWER INC - Form 424B5

successfully market, distribute and service our products and services internationally; our ability to improve system reliability for our products; competitive factors, such as price competition and competition from other traditional and alternative energy companies; our ability to protect our intellectual property; the cost of complying with current and future federal, state and international governmental regulations; the risks associated with potential future acquisitions; the volatility of our stock price; and other risks and uncertainties referenced under "Risk Factors" above and in any applicable prospectus supplement or free writing prospectus and any documents incorporated by reference herein or therein. Readers should not place undue reliance on our forward-looking statements. These forward-looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake or intend to update any forward-looking statements after the date of this prospectus or the respective dates of documents incorporated herein or therein that include forward-looking statements.

RATIO OF COMBINED FIXED CHARGES AND PREFERENCE DIVIDENDS TO EARNINGS

Our ratio of combined fixed charges and preference dividends to earnings for each of the five most recently completed fiscal years and any required interim periods will each 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 and/or preference securities in the future.

USE OF PROCEEDS

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, the net proceeds received by us from our sale of the securities described in this prospectus will be added to our general funds and will be used for our general corporate purposes. From time to time, we may engage in additional public or private financings of a character and amount which we may deem appropriate.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, remarketing firms or other third parties and/or directly to one or more purchasers. In some cases, we or dealers acting with us or on our behalf may also purchase our securities and reoffer them to the public. We may also offer and sell, or agree to deliver, our securities pursuant to, or in connection with, any option agreement or other contractual arrangement. We may distribute securities from time to time in one or more transactions:

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

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

Each time we offer and sell securities, we will provide a prospectus supplement that will set forth the terms of the offering of the securities, including:

the name or names of the underwriters, if any;

the purchase price of the securities and the proceeds we will receive from the sale;

any over-allotment or other options under which underwriters may purchase additional securities;

any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;

any public offering price;

any discounts or concessions allowed or reallocated or paid to dealers; and

Edgar Filing: PLUG POWER INC - Form 424B5

any securities exchange or market on which the securities may be listed.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more 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. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. If applicable, we will include the names of the specific managing underwriter or underwriters, as well as the names of any other underwriters, and the terms of

Edgar Filing: PLUG POWER INC - Form 424B5

the transactions, including the compensation the underwriters and dealers will receive, in the applicable prospectus supplement. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option or option to purchase additional securities. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we or they have a material relationship. The prospectus supplement, naming the underwriter, will describe the nature of any such relationship.

We may sell securities directly or through agents we or they designate from time to time. The prospectus supplement will name any agent involved in the offering and sale of securities and any commissions we will pay to them. Unless the prospectus supplement states otherwise, any agent will be acting on a best-efforts basis for the period of its appointment. Agents may be deemed to be underwriters under the Securities Act, of any of our securities that they offer or sell.

We may use a dealer to sell our securities. If we use a dealer, we will sell our securities to the dealer, as principal. The dealer will then sell our securities to the public at varying prices that the dealer will determine at the time it sells our securities. We will include the name of the dealer and the terms of the transactions with the dealer in the applicable prospectus supplement.

We may authorize agents or underwriters to solicit offers by certain purchasers to purchase securities from us or them at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. The prospectus supplement will set forth the conditions to these contracts and any commissions we must pay for solicitation of these contracts.

We may effect sales of securities in connection with forward sale, option or other types of agreements with third parties. Any distribution of securities pursuant to any forward sale agreement may be effected from time to time in one or more transactions that may take place through a stock exchange, including block trades or ordinary broker's transactions, or through broker-dealers acting either as principal or agent, or through privately-negotiated transactions, or through an underwritten public offering, or through a combination of any such methods of sale, at market prices prevailing at the time of sale, prices relating to such prevailing market prices or at negotiated or fixed prices.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher

Edgar Filing: PLUG POWER INC - Form 424B5

than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the NASDAQ Capital Market may engage in passive market making transactions in the common stock on the NASDAQ Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

The specific terms of the lock-up provisions, if any, in respect of any given offering will be described in the applicable prospectus supplement.

DESCRIPTION OF CAPITAL STOCK

This section describes the general terms of our common stock and preferred stock that we may offer from time to time. For more detailed information, a holder of our common stock and/or preferred stock should refer to our certificate of incorporation, our by-laws and our shareholder rights agreement with respect to our preferred share purchase rights, copies of which are filed with the SEC as exhibits to the registration statement of which this prospectus is a part.

General

Our authorized capital stock consists of 450,000,000 shares of common stock, \$0.01 par value per share, and 5,000,000 shares of preferred stock, \$0.01 par value per share. As of November 18, 2016, there were 180,610,344 shares of our common stock outstanding and 5,231 shares of our Series C Redeemable Convertible Preferred Stock ("Series C Preferred Stock") outstanding.

The following summary description of our capital stock is based on the provisions of our amended and restated certificate of incorporation and amended and restated bylaws and the applicable provisions of the Delaware General Corporation Law. This information is qualified entirely by reference to the applicable provisions of our amended and restated certificate of incorporation, amended and restated bylaws and the Delaware General Corporation Law. For information on how to obtain copies of our amended and restated certificate of incorporation and amended and restated bylaws, which are exhibits to the registration statement of which this prospectus is a part, see "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference."

Common Stock

Holders of shares of our common stock are entitled to one vote for each share held of record on all matters to be voted on by stockholders, including the election of directors. Our amended and restated certificate of incorporation and amended and restated bylaws do not provide for cumulative voting rights. Because of this, the holders of a majority of our common stock entitled to vote in any election of directors can elect all of the directors standing for election. Subject to the preferences that may be applicable to any then outstanding preferred stock (including the Series C Preferred Stock), the holders of our outstanding shares of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock (including the Series C Preferred Stock). Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holder of our Series C Preferred Stock as well as the rights of any series of our preferred stock that we may designate and issue in the future.

Preferred Stock

Pursuant to our amended and restated certificate of incorporation, our board of directors has the authority, without further action by the stockholders (unless such stockholder action is required by applicable law or NASDAQ rules), to designate and issue up to 5,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series, and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Edgar Filing: PLUG POWER INC - Form 424B5

We will fix the rights, preferences and privileges of the preferred stock of each such series, as well as any qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of that series of preferred stock. This description will include:

the title and stated value;

the number of shares we are offering;

the liquidation preference per share;

the purchase price;

the dividend rate, period and payment date and method of calculation for dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;

voting rights, if any, of the preferred stock;

preemptive rights, if any;

restrictions on transfer, sale or other assignment, if any;

whether interests in the preferred stock will be represented by depositary shares;

Edgar Filing: PLUG POWER INC - Form 424B5

a discussion of any material United States federal income tax considerations applicable to the preferred stock;

the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;

any limitations on the issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class (or, in some cases, as a series) on an amendment to our amended and restated certificate of incorporation if the amendment would change the par value, the number of authorized shares of the class or the powers, preferences or special rights of the class or series so as to adversely affect the class or series, as the case may be. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Edgar Filing: PLUG POWER INC - Form 424B5

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of our common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. Additionally, the issuance of preferred stock may have the effect of decreasing the market price of our common stock.

Series C Redeemable Convertible Preferred Stock

The Series C Preferred Stock votes together with the common stock on an as-converted basis on all matters, including the election of directors, except as otherwise required by law. Each share of Series C Preferred Stock is entitled to a number of votes equal to the number of whole shares of common stock into which such share of Series C Preferred Stock is convertible.

The Series C Preferred Stock ranks senior to the common stock with respect to rights upon the liquidation, dissolution or winding up of our company. The Series C Preferred Stock is entitled to receive dividends at a rate of 8% per annum, based upon the original issue price, payable in equal quarterly installments in cash or in shares of common stock, at our option. The Series C Preferred Stock is convertible into shares of common stock, at a conversion price equal to \$0.2343 per share (as of November 17, 2016 and subject to future adjustments). As of November 17, 2016, the outstanding shares of our Series C Preferred Stock are convertible into an aggregate of 5,554,594 shares of common stock. The Series C Preferred Stock has customary redemption rights at the election of either us or the holder thereof as well as weighted average anti-dilution protection.

Delaware Anti-Takeover Law and Provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Delaware Anti-Takeover Law. We are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the 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 for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers and (b) shares owned 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

on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

any merger or consolidation involving the corporation and the interested stockholder;

any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;

Edgar Filing: PLUG POWER INC - Form 424B5

subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; and

the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation or any entity or person affiliated with or controlling or controlled by the entity or person.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws. Provisions of our amended and restated certificate of incorporation and amended and restated bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

permit our board of directors to issue up to 5,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate;

provide that the authorized number of directors may be changed only by resolution of the board of directors;

provide that all vacancies, including newly created directorships, may, except as otherwise required by law and subject to the rights of the holders of any series of preferred stock, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;

divide our board of directors into three classes;

require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;

provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner, and also specify requirements as to the form and content of a stockholder's notice;

do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose); and

provide that special meetings of our stockholders may be called only by the chairman of the board, our chief executive officer, our president or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then outstanding common stock.

Shareholder Rights Plan

We have a shareholder rights plan, the purpose of which is, among other things, to enhance our board's ability to protect stockholder interests and to ensure that stockholders receive fair treatment in the event any coercive takeover attempt of our company is made in the future. The shareholder rights plan could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, us or a

large block of our common stock. The following summarizes material terms of the

Edgar Filing: PLUG POWER INC - Form 424B5

shareholder rights plan and the associated preferred share purchase rights. This description is subject to the detailed provisions of, and is qualified by reference to, the shareholder rights agreement which has been filed as an exhibit to our Registration Statement on Form 8-A dated June 24, 2009, as amended by the Amendment No. 1 to Form 8-A filed with the SEC on May 6, 2011, the Amendment No. 2 to Form 8-A filed with the SEC on March 19, 2012, the Amendment No. 3 to Form 8-A filed with the SEC on March 26, 2012, the Amendment No. 4 to Form 8-A filed with the SEC on February 13, 2013 and the Amendment No. 5 to Form 8-A filed with the SEC on May 20, 2013.

Each outstanding share of our common stock evidences one preferred share purchase right. Under the terms of the shareholder rights agreement, each preferred share purchase right entitles the registered holder to purchase from us one ten-thousandth of a share (each, a "unit") of our Series A Junior Participating Cumulative Preferred Stock, par value \$0.01 per share, at a cash exercise price of \$6.50 per unit, subject to adjustment. Initially, the preferred share purchase rights are not exercisable and are attached to and trade with all shares of common stock. The preferred share purchase rights will separate from the common stock and will become exercisable upon the earlier of:

the close of business on the tenth calendar day following the first public announcement that a person or group of affiliated or associated persons has acquired beneficial ownership of 15% or more of the outstanding shares of common stock, other than as a result of repurchases of stock by the Company or certain inadvertent actions by a stockholder, or

the close of business on the tenth business day (or such later day as the Board of Directors may determine) following the commencement of a tender offer or exchange offer that could result upon its consummation in a person or group becoming the beneficial owner of 15% or more of the outstanding shares of common stock.

With respect to any person who beneficially owned 15% or more of the outstanding shares of common stock as of June 23, 2009, such person's share ownership will not cause the preferred share purchase rights to be exercisable unless:

such person acquires beneficial ownership of shares of common stock representing more than an additional 0.5% of the outstanding shares of common stock held by such person as of June 23, 2009; or

if after June 23, 2009 such person reduces its beneficial ownership of shares of common stock and such person subsequently acquires beneficial ownership of more than an additional 0.5% of the common stock.

In the event that a person or group of affiliated or associated persons has acquired beneficial ownership of 15% or more of the outstanding shares of common stock, proper provision will be made so that each holder of a preferred share purchase right (other than an acquiring person or its associates or affiliates, whose preferred share purchase rights shall become null and void) will thereafter have the right to receive (a "subscription right") upon exercise, in lieu of a number of units, that number of shares of our common stock (or, in certain circumstances, including if there are insufficient shares of common stock to permit the exercise in full of the preferred share purchase rights, units of preferred stock, other securities, cash or property, or any combination of the foregoing) having a market value of two times the exercise price of the preferred share purchase rights.

In the event that, at any time following the date that a person or group of affiliated or associated persons has acquired beneficial ownership of 15% or more of the outstanding shares of common stock:

we consolidate with, or merge with and into, any other person, and we are not the continuing or surviving corporation,

any person consolidates with us, or merges with and into us and we are the continuing or surviving corporation of such merger and, in connection with such merger, all or part of the

Edgar Filing: PLUG POWER INC - Form 424B5

shares of common stock are changed into or exchanged for stock or other securities of any other person or cash or any other property, or

50% or more of our assets or earning power is sold, mortgaged or otherwise transferred,

each holder of a preferred share purchase right (other than an acquiring person or its associates or affiliates, whose preferred share purchase rights shall become null and void) will thereafter have the right to receive (a "merger right"), upon exercise, common stock of the acquiring company having a market value equal to two times the exercise price of the preferred share purchase rights. The holder of a preferred share purchase right will continue to have this merger right whether or not such holder has exercised its subscription right. Preferred share purchase rights that are or were beneficially owned by an acquiring person may (under certain circumstances specified in the shareholder rights agreement) become null and void.

The preferred share purchase rights may be redeemed in whole, but not in part, at a price of \$0.001 per preferred share purchase right (payable in cash, common stock or other consideration deemed appropriate by the board of directors) by the board of directors only until the earlier of:

the time at which any person becomes an acquiring person; or

the expiration date of the shareholder rights agreement.

Immediately upon the action of the board of directors ordering redemption of the preferred share purchase rights, the preferred share purchase rights will terminate and thereafter the only right of the holders of preferred share purchase rights will be to receive the redemption price.

The shareholder rights agreement requires an independent committee of the board of directors to review at least once every three years whether maintaining the shareholder rights agreement continues to be in the best interests of our stockholders.

The shareholder rights agreement may be amended by the board of directors in its sole discretion at any time prior to the time at which any person becomes an acquiring person. After such time the board of directors may, subject to certain limitations set forth in the shareholder rights agreement, amend the shareholder rights agreement only to cure any ambiguity, defect or inconsistency, to shorten or lengthen any time period, or to make changes that do not adversely affect the interests of preferred share purchase rights holders (excluding the interests of an acquiring person or its associates or affiliates). In addition, the board of directors may at any time prior to the time at which any person becomes an acquiring person, amend the shareholder rights agreement to lower the threshold at which a person becomes an acquiring person to not less than the greater of:

the sum of 0.001% and the largest percentage of the outstanding common stock then owned by any person, and

10%.

Until a preferred share purchase right is exercised, the holder will have no rights as a stockholder of the Company (beyond those as an existing stockholder), including the right to vote or to receive dividends. While the distribution of the preferred share purchase rights will not be taxable to stockholders or to us, stockholders may, depending upon the circumstances, recognize taxable income in the event that the preferred share purchase rights become exercisable for units, our other securities, other consideration or for common stock of an acquiring company.

The preferred share purchase rights will expire at the close of business on June 23, 2019, unless previously redeemed or exchanged by us.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc. The transfer agent and registrar's address is 1717 Arch Street, Suite 1300, Philadelphia, Pennsylvania, 19103. The transfer agent and registrar for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement for that series.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

General

If warrants for the purchase of common stock or preferred stock are offered, the prospectus supplement or free writing prospectus will describe the following terms, to the extent applicable:

the offering price and aggregate number of warrants offered;

the currency for which the warrants may be purchased;

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

if applicable, the date on and after which the warrants and the related securities will be separately transferable;

the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;

the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

the terms of any rights to redeem or call the warrants;

any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;

the dates on which the right to exercise the warrants will commence and expire;

the manner in which the warrant agreements and warrants may be modified;

Edgar Filing: PLUG POWER INC - Form 424B5

the terms of the securities issuable upon exercise of the warrants; and

any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Edgar Filing: PLUG POWER INC - Form 424B5

Warrants for the purchase of debt securities will be in registered form only. If warrants for the purchase of debt securities are offered, the prospectus supplement or free writing prospectus will describe the following terms, to the extent applicable:

the offering price and aggregate number of warrants offered;

the currencies in which the warrants are being offered;

the designation, aggregate principal amount, currencies, denominations and terms of the series of debt securities that can be purchased if a holder exercises a warrant;

the designation and terms of any series of debt securities with which the warrants are being offered and the number of warrants offered with each such debt security;

the date on and after which the holder of the warrants can transfer them separately from the related series of debt securities;

the principal amount of the series of debt securities that can be purchased if a holder exercises a warrant and the price at which and currencies in which such principal amount may be purchased upon exercise;

the terms of any rights to redeem or call the warrants;

the date on which the right to exercise the warrants begins and the date on which such right expires;

federal income tax consequences of holding or exercising the warrants; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF OUR DEBT SECURITIES

We may issue senior debt securities from time to time, in one or more series, under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series, under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to this registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures.

None of the indentures will limit the amount of debt securities that we may issue. The applicable indenture will provide that debt securities may be issued up to an aggregate principal amount authorized from time to time by us and may be payable in any currency or currency unit designated by us or in amounts determined by reference to an index.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplement or free writing prospectus and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete applicable indenture that contains the terms of the debt securities.

General

We will describe in the applicable prospectus supplement or free writing prospectus the terms of the series of debt securities being offered, including:

the title;

the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;

any limit on the amount that may be issued;

whether or not we will issue the series of debt securities in global form, and, if so, the terms and who the depository will be;

the maturity date;

whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a United States person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;

the terms of the subordination of any series of subordinated debt;

Edgar Filing: PLUG POWER INC - Form 424B5

the place where payments will be payable;

restrictions on transfer, sale or other assignment, if any;

Edgar Filing: PLUG POWER INC - Form 424B5

our right, if any, to defer payment of interest and the maximum length of any such deferral period;

the date, if any, after which, the conditions upon which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option, to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the indenture will restrict our ability or the ability of our subsidiaries to:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends or make distributions in respect of our capital stock or the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with stockholders or affiliates;

issue or sell stock of our subsidiaries; or

effect a consolidation or merger;

whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of certain material or special United States federal income tax considerations applicable to the debt securities;

Edgar Filing: PLUG POWER INC - Form 424B5

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

the applicability of the provisions in the indenture on discharge;

whether the debt securities are to be offered at a price such that they will be deemed to be offered at an "original issue discount" as defined in paragraph (a) of Section 1273 of the Internal Revenue Code of 1986, as amended;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations or advisable in connection with the marketing of the debt securities.

We may, from time to time, without notice to or the consent of the holders of any series of debt securities, create and issue further debt securities of any such series ranking equally with the debt securities of such series in all respects (or in all respects other than (a) the payment of interest accruing prior to the issue date of such further debt securities or (b) the first payment of interest following the issue date of such further debt securities). Such further debt securities may be consolidated and form a single series with the debt securities of such series and have the same terms as to status, redemption or otherwise as the debt securities of such series.

Certain Terms of the Senior Debt Securities

Conversion or Exchange Rights. We will set forth in the applicable prospectus supplement or free writing prospectus the terms on which a series of senior debt securities may be convertible into or exchangeable for our common stock, our preferred stock or other securities (including securities of a third-party). We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock, our preferred stock or other securities (including securities of a third-party) that the holders of the series of senior debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale. Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of senior debt securities, the senior debt securities will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the senior indentures or the senior debt securities, as appropriate. If the senior debt securities are convertible into or exchangeable for other securities of ours or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the senior debt securities into securities that the holders of the senior debt securities would have received if they had converted the senior debt securities before the consolidation, merger or sale.

No Protection in the Event of a Change in Control. Unless we indicate otherwise in a prospectus supplement or free writing prospectus applicable to a particular series of senior debt securities, the senior debt securities will not contain any provisions that may afford holders of the senior debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction (whether or not such transaction results in a change in control).

Events of Default. Unless we provide otherwise in the prospectus supplement or free writing prospectus applicable to a particular series of senior debt securities, the following are events of default under the senior indentures with respect to any series of senior debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days (or such other period as may be specified for such series) and the time for payment has not been extended;

if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable at maturity, upon redemption or repurchase or otherwise (and, if specified for such series, the continuance of such failure for a specified period), and the time for payment has not been extended;

Edgar Filing: PLUG POWER INC - Form 424B5

if we fail to observe or perform any other covenant contained in the senior debt securities or the senior indentures, other than a covenant that is specifically dealt with elsewhere in the senior indenture, and our failure continues for 90 days after we receive notice from the trustee or holders of at least a majority in aggregate principal amount of the outstanding senior debt securities of the applicable series; and

if specified events of bankruptcy, insolvency or reorganization occur.

We will describe in each applicable prospectus supplement or free writing prospectus any additional events of default relating to the relevant series of senior debt securities.

If an event of default with respect to senior debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least a majority in aggregate principal amount of the outstanding senior debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the unpaid principal, premium, if any, and accrued interest, if any, of each issue of senior debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

Unless otherwise specified in the prospectus supplement or free writing prospectus applicable to a particular series of senior debt securities originally issued at a discount, the amount due upon acceleration shall include only the original issue price of the senior debt securities, the amount of original issue discount accrued to the date of acceleration and accrued interest, if any.

The holders of a majority in principal amount of the outstanding senior debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the senior indenture. Any waiver shall cure the default or event of default.

Upon certain conditions, declarations of acceleration may be rescinded and annulled and past defaults may be waived by the holders of a majority in aggregate principal amount of all the senior debt securities of such series affected by the default. Furthermore, prior to a declaration of acceleration and subject to various provisions in the senior indenture, the holders of a majority in aggregate principal amount of a series of senior debt securities, by notice to the trustee, may waive an existing default or event of default with respect to such senior debt securities and its consequences, except a default in the payment of principal of, premium, if any, on or interest on such senior debt securities. Upon any such waiver, such default shall cease to exist, and any event of default with respect to such senior debt securities shall be deemed to have been cured, for every purpose of the senior indenture, but no such waiver shall extend to any subsequent or other default or event of default or impair any right consequent thereto.

The holders of a majority in aggregate principal amount of a series of senior debt securities will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee with respect to such senior debt securities. However, the trustee may refuse to follow any direction that conflicts with law or the senior indenture that may involve the trustee in personal liability or that the trustee determines in good faith may be unduly prejudicial to the rights of holders of such series of senior debt securities not joining in the giving of such direction and may take any other action it deems proper that is not inconsistent with any such direction received from holders of such series of senior debt securities. A

Edgar Filing: PLUG POWER INC - Form 424B5

holder of the senior debt securities of any series will have the right to institute a proceeding under the senior indentures or the securities or to appoint a receiver or trustee, or to seek other remedies if:

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

the holders of at least a majority in aggregate principal amount of the outstanding senior debt securities of that series have made written request, and such holders have offered reasonable indemnity to the trustee or security satisfactory to it against any loss, liability or expense or to be incurred in compliance with instituting the proceeding as trustee; and

the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding senior debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of senior debt securities if we default in the payment of the principal, premium, if any, or interest on, the senior debt securities, or other defaults that may be specified in the applicable prospectus supplement or free writing prospectus.

Modification and Waiver. We and the trustee may amend, supplement or modify a senior indenture or the senior debt securities without the consent of any holders with respect to the following specific matters:

to fix any ambiguity, defect or inconsistency in the senior indenture or to conform the senior indenture or the senior debt securities to the description of senior debt securities of such series set forth in this prospectus or any applicable prospectus supplement or any free writing supplement;

to convey, transfer, assign, mortgage or pledge any assets as security for the senior debt securities of one or more series;

to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of senior debt securities;

to evidence the succession of another corporation, and the assumption by such successor corporation of our covenants, agreements and obligations under the senior indenture;

to provide for or add guarantors with respect to the senior debt securities of any series;

to establish the form of any certifications required to be furnished pursuant to the terms of the senior indenture or any series of senior debt securities, or to add to the rights of the holders of any series of senior debt securities;

to evidence and provide for the acceptance of appointment hereunder by a successor trustee or to make such changes as shall be necessary to provide for or facilitate the administration of the trusts in the senior indenture by more than one trustee;

to make any change to the senior debt securities of any series, so long as no senior debt securities of such series are outstanding

to provide for uncertificated senior debt securities and to make all appropriate changes for such purpose;

Edgar Filing: PLUG POWER INC - Form 424B5

to add to our covenants such new covenants, restrictions, conditions or provisions for the benefit of the holders, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred to us in the senior indenture; or

Edgar Filing: PLUG POWER INC - Form 424B5

to change anything that does not materially adversely affect the interests of any holder of senior debt securities of any series.

Other amendments and modifications of the senior indenture or the senior debt securities issued may be made, and our compliance with any provision of the senior indenture with respect to any series of senior debt securities may be waived, with the consent of the holders of a majority of the aggregate principal amount of the outstanding senior debt securities of all series affected by the amendment or modification (voting together as a single class); provided, however, that each affected holder must consent to any modification, amendment or waiver that:

extends the stated maturity of any senior debt securities;

reduces the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption or repurchase of any senior debt securities;

reduces the rate or extends the time of payment of interest on any senior debt securities; or

reduces the percentage of senior debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Satisfaction and Discharge. We can elect satisfy and discharge our obligations with respect to one or more series of senior debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;

replace stolen, lost or mutilated debt securities of the series;

maintain paying agencies;

hold monies for payment in trust;

recover excess money held by the trustee;

compensate and indemnify the trustee; and

appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium and interest on, the senior debt securities of the series on the dates payments are due.

Under current U.S. federal income tax law, the deposit and our legal release from the senior debt securities would be treated as though we took back a holder's senior debt securities and gave such holder his or her share of the cash and debt securities or bonds deposited in trust. In that event, such holder could recognize gain or loss on the senior debt securities such holder gives back to us. Holders of the senior debt securities should consult their own advisers with respect to the tax consequences to them of such deposit and discharge, including the applicability and effect of tax laws other than the U.S. federal income tax law.

Information Concerning the Trustee. The trustee, other than during the occurrence and continuance of an event of default under a senior indenture, undertakes to perform only those duties as are specifically set forth in the applicable senior indenture. Upon an event of default under a senior indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs.

Edgar Filing: PLUG POWER INC - Form 424B5

Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the senior indentures at the request of any holder of senior debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

We may have normal banking relationships with the trustee in the ordinary course of business.

Certain Terms of the Subordinated Debt Securities

Other than the terms of the subordinated indenture and subordinated debt securities relating to subordination or otherwise as described in the prospectus supplement or free writing prospectus relating to a particular series of subordinated debt securities, the terms of the subordinated indenture and subordinated debt securities are identical in all material respects to the terms of the senior indenture and senior debt securities.

Additional or different subordination terms may be specified in the prospectus supplement applicable to a particular series.

Subordination. The indebtedness evidenced by the subordinated debt securities is subordinate to the prior payment in full of all of our senior indebtedness, as defined in the subordinated indenture. During the continuance beyond any applicable grace period of any default in the payment of principal, premium, interest or any other payment due on any of our senior indebtedness, we may not make any payment of principal of, or premium, if any, on or interest on the subordinated debt securities (except for certain sinking fund payments). In addition, upon any payment or distribution of our assets upon any dissolution, winding-up, liquidation or reorganization, the payment of the principal of, or premium, if any, on and interest on the subordinated debt securities will be subordinated to the extent provided in the subordinated indenture in right of payment to the prior payment in full of all our senior indebtedness. Because of this subordination, if we dissolve or otherwise liquidate, holders of our subordinated debt securities may receive less, ratably, than holders of our senior indebtedness. The subordination provisions do not prevent the occurrence of an event of default under the subordinated indenture.

Governing Law

The indentures and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York.

Ranking of Debt Securities

The senior debt securities will rank equally in right of payment to all our other senior unsecured debt. The subordinated debt securities will be subordinate and junior in priority of payment to certain of our other indebtedness (including senior debt securities) to the extent described in a prospectus supplement or free writing prospectus.

DESCRIPTION OF UNITS

We may issue, in one more series, units consisting of common stock, preferred stock, debt securities, and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. 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.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports 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 may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

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 being offered, 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 in this section; 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 Capital Stock", "Description of Warrants" and "Description of Debt Securities" will apply to each unit and to any common stock, preferred stock or warrant included in each unit, respectively.

Issuance in Series

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

Enforceability of Rights by Holders of Units

Each unit agent 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 single bank or trust company may act as unit agent for more than one series of units. 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.

Title

We, and any unit agent 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.

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon by Goodwin Procter LLP, Boston, Massachusetts.

EXPERTS

The consolidated financial statements of Plug Power Inc. and subsidiaries as of December 31, 2015 and 2014, and for each of the years in the three-year period ended December 31, 2015, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2015 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.

The audit report contains an explanatory paragraph that states that the scope of management's assessment of internal control over financial reporting excluded the internal control over financial reporting of HyPulsion U.S. Holding, Inc. ("HyPulsion"), which the Company acquired in July 2015. HyPulsion represented 7.3% of total assets and 0.3% of total revenue included in the Company's consolidated financial statements as of and for the year ended December 31, 2015. KPMG LLP's audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of HyPulsion.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

This prospectus is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC. We are a public company and file proxy statements, annual, quarterly and special reports and other information with the SEC. The registration statement, such reports and other information can be inspected and copied at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington D.C. 20549. Copies of such materials, including copies of all or any portion of the registration statement, can be obtained from the Public Reference Room of the SEC at prescribed rates. You can call the SEC at 1-800-SEC-0330 to obtain information on the operation of the Public Reference Room. Such materials may also be accessed electronically by means of the SEC's home page on the Internet (www.sec.gov).

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below that we have filed with the SEC:

our Annual Report on Form 10-K for the year ended December 31, 2015, filed on March 14, 2016;

the information specifically incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2015 from our definitive proxy statement on Schedule 14A (other than information furnished rather than filed), which was filed with the SEC on April 15, 2016;

our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016, June 30, 2016 and September 30, 2016, filed on May 10, 2016, August 9, 2016 and November 8, 2016, respectively;

our Current Reports on Form 8-K filed on March 4, 2016 (except for information contained therein which is furnished rather than filed), May 23, 2016 and June 30, 2016 (except for information contained therein which is furnished rather than filed); and

the section entitled "Description of Registrant's Securities to be Registered" contained in our Registration Statement on Form 8-A, filed pursuant to Section 12(b) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, on June 24, 2009, as amended by the Amendment No. 1 to Form 8-A filed by the Company with the SEC on May 6, 2011, the Amendment No. 2 to Form 8-A filed by the Company with the SEC on March 19, 2012, the Amendment No. 3 to Form 8-A filed by the Company with the SEC on March 26, 2012, the Amendment No. 4 to Form 8-A filed by the Company with the SEC on February 13, 2013 and the Amendment No. 5 to Form 8-A filed by the Company with the SEC on May 20, 2013).

We also incorporate by reference into this prospectus all documents (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (i) after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of the registration statement, or (ii) after the date of this prospectus, in each case except as to any portion of any future report or document that is not deemed filed under such provisions, until we sell all of the shares covered by this prospectus or the sale of shares by us pursuant to this prospectus is terminated.

You may access our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to any of these reports, free of charge on the SEC's website. You may also access the documents incorporated by reference on our website at www.plugpower.com. Other than the foregoing documents incorporated by reference, the information contained in, or that can be accessed through, our website is not part of this prospectus.

In addition, we will furnish without charge to each person, including any beneficial owner, to whom a prospectus is delivered, on written or oral request of such person, a copy of any or all of the documents incorporated by reference in this prospectus (not including exhibits to such documents, unless such exhibits are specifically incorporated by reference in this prospectus or into such documents). Such requests may be directed to Corporate Secretary, Plug Power Inc., 968 Albany-Shaker Road, Latham, New York, 12110, or call (518) 782-7700.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

Table of Contents

10,000,000 Shares

Common Stock

PROSPECTUS SUPPLEMENT

March 20, 2019
