

PLUG POWER INC  
Form 10-K  
March 16, 2010

**Table of Contents**

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

**FORM 10-K**

**(Mark One)**

**x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE  
ACT OF 1934**

**For the fiscal year ended December 31, 2009**

**.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT**

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission file number: 0-27527**

**Plug Power Inc.**

**(Exact Name of Registrant as Specified in Its Charter)**

**Delaware  
(State or Other Jurisdiction)**

**22-3672377  
(I.R.S. Identification)**

**of Incorporation or Organization)                      Number)**  
**968 ALBANY SHAKER ROAD, LATHAM, NEW YORK 12110**

**(Address of Principal Executive Offices, including Zip Code)**

**(518) 782-7700**

**(Registrant's telephone number, including area code)**

**Securities registered pursuant to Section 12(b) of the Act:**

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
Common Stock, par value \$.01 per share	The NASDAQ Stock Market LLC
Series A Junior Participating Cumulative Preferred Stock, par value \$.01 per share	The NASDAQ Stock Market LLC

**Securities registered pursuant to Section 12(g) of the Act:   None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Sections 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting and non-voting common equity of the registrant held by non-affiliates of the registrant on June 30, 2009 was \$73.3 million.

As of March 5, 2010, 131,053,212 shares of the registrant's common stock were issued and outstanding.

#### **DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive proxy statement relating to the registrant's 2010 Annual Meeting of stockholders are incorporated by reference into Part III of this report to the extent described therein.



**Table of Contents**

**INDEX TO FORM 10-K**

**PART I**

	<u>Page</u>
Item 1. <u>Business</u>	3
Item 1A. <u>Risk Factors</u>	10
Item 1B. <u>Unresolved Staff Comments</u>	22
Item 2. <u>Properties</u>	22
Item 3. <u>Legal Proceedings</u>	22
Item 4. <u>Removed and Reserved</u>	23

**PART II**

Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	23
Item 6. <u>Selected Financial Data</u>	25
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	26
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	43
Item 8. <u>Financial Statements and Supplementary Data</u>	43
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	44
Item 9A. <u>Controls and Procedures</u>	44
Item 9B. <u>Other Information</u>	44

**PART III**

Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	45
Item 11. <u>Executive Compensation</u>	45
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	46

Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	46
Item 14.	<u>Principal Accounting Fees and Services</u>	47
<b>PART IV</b>		
Item 15.	<u>Exhibits and Financial Statement Schedules</u>	47

## **Table of Contents**

### **PART I**

#### **Forward-Looking Statements**

*The following discussion should be read in conjunction with our accompanying Consolidated Financial Statements and Notes thereto included within this Annual Report on Form 10-K. In addition to historical information, this Annual Report on Form 10-K and the following discussion contain 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, estimate, expect, intend, may, should, will and would or similar words. 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 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 unit orders will not ship, be installed and/or convert to revenue, in whole or in part; the cost and timing of developing our products and our ability to raise the necessary capital to fund such development costs; the cost and availability of fuel and fueling infrastructures for our products; market acceptance of our GenDrive and GenSys systems; 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 improve system reliability for both GenDrive and GenSys; our ability to successfully expand our product lines; competitive factors, such as price competition and competition from other traditional and alternative energy companies; our ability to manufacture products on a large-scale commercial basis our ability to protect our intellectual property; the cost of complying with current and future federal, state and international governmental regulations; the impact of deregulation and restructuring of the electric utility industry on demand for Plug Power's energy products; and other risks and uncertainties discussed under Item IA Risk Factors. 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 Annual Report on Form 10-K.*

#### **Item 1. Business Company Background**

Plug Power Inc., or the Company, is a development stage enterprise involved in the design, development and manufacture of fuel cell systems for industrial off-road (forklift or material handling) markets and stationary power markets worldwide. We are a development stage enterprise because substantially all of our resources and efforts are aimed at the discovery of new knowledge that could lead to significant improvement in fuel cell reliability and durability, and the establishment, expansion and stability of markets for our products. We continue to experience significant net outflows of cash from operations and devote significant efforts towards financial planning in order to forecast future cash spending and the ability to continue product research and development activities and expansion of markets for our products. Fuel cell technology within our principal target markets, material handling power and remote prime power, and our secondary markets, residential and backup power, is still early in the technology adoption life cycle.



## **Table of Contents**

In 2010, as the Company plans to enter the commercial adoption phase of its GenDrive™ and GenSys® products, with commensurate resource commitments to selling, marketing, and service activities, it is expected that we will no longer be a development stage enterprise.

We are focused on proton exchange membrane, or PEM, fuel cell and fuel processing technologies and fuel cell/battery hybrid technologies, 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 (LPG), natural gas, propane, methanol, ethanol, gasoline or biofuels. Hydrogen can also be obtained from the electrolysis of water. Hydrogen can be purchased directly from industrial gas providers or can be produced on-site at consumer locations.

We sell our products worldwide through our direct product sales force, original equipment manufacturers (OEMs) and their dealer networks. We sell to business, industrial and government customers.

We were organized in the State of Delaware on June 27, 1997 and became listed on the NASDAQ exchange on October 29, 1999. We were originally a joint venture between Edison Development Corporation and Mechanical Technology Incorporated. In 2007 we merged with and acquired all the assets, liabilities and equity of Cellex Power Products, Inc. (Cellex) and General Hydrogen Corporation (General Hydrogen).

Unless the context indicates otherwise, the terms Company, Plug Power, we, our or us as used herein refers to Plug Power Inc. (the registrant) and its subsidiaries.

### ***Business Strategy***

We are committed to developing effective, economical and reliable fuel cell products and services for businesses, government agencies and, ultimately, commercial consumers. Building on our substantial fuel cell application and product integration experience, we are focused on building strong relationships with customers who value increased reliability, productivity, energy security and a sustainable future.

Our business strategy leverages our unique fuel cell application and integration knowledge to identify early adopter markets for which we can design and develop innovative systems and customer solutions that provide superior value, ease-of-use, and environmental design.

We have made significant progress in our analysis of the material handling and stationary power markets. We believe we have developed reliable products which allow the end customers to eliminate incumbent power sources from their operations.

We announced our strategy for achieving profitability on October 8, 2009 in a presentation that was included as an exhibit to the Company's Form 8-K dated October 8, 2009 as previously filed with the Securities and Exchange Commission.



## **Table of Contents**

Our strategy is to focus our resources on our two commercial products, GenDrive, a superior alternative to lead-acid batteries in the material handling market, and GenSys, a continuous-run prime power system that replaces diesel generators at remote telecommunication sites where the grid is non-existent or unreliable.

Our strategy also includes the following objectives: decrease product costs by leveraging the supply chain, lower manufacturing costs, improve system reliability for both product lines, expand our sales network to effectively reach more of our targeted customers, and provide customers with high-quality products, service and post-sales support experience.

Our longer-term objectives are to deliver economic, social, and environmental benefits in terms of reliable, clean, cost-effective fuel cell solutions and, ultimately, sustainability.

We believe continued investment in research and development is critical to the development and enhancement of innovative products, technologies and services. In addition to evolving our direct hydrogen fueled systems, we continue to capitalize on our investment in power electronics, controls, software and reforming technology.

## ***Business Organization***

We manage our business as a single enterprise, emphasizing shared learning across end-user applications and common supplier/vendor relationships.

## ***Products***

We sell and continue to develop a range of fuel cell products and services including hydrogen fuel cell low-temperature Proton Exchange Membrane (PEM) systems for motive and stationary power and a high-temperature fuel cell system for residential and light commercial co-generation.

Our primary product lines that we sell are:

**GenDrive™** Hydrogen fueled PEM fuel cell system to provide power to industrial vehicles. We are focusing our primary 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. In 2009, we successfully introduced a new GenDrive product offering to augment our product suite and allow full site conversions. During the year, we expanded our sales to commercial customers including Walmart, FedEx Freight, Coca-Cola Bottling Co., Sysco and Wegmans. We expect continued sales momentum in 2010 with our key target customers.

**GenSys®** Liquid petroleum gas (LPG) fueled continuous prime power system. We continue to develop a low-temperature (60°C) PEM fuel cell system that supports remote prime power applications, specifically for the telecommunications sector, where grid power is unreliable or non-existent. The product has been improved over the past year through standardization and increasing the power capability to account for rising loads at telecom sites. As a result of successful field trials at a Tata Teleservices Ltd. (TTSL) cell tower site in remote India during 2008, in May 2009 Plug Power received an anchor order from Wireless TT Info Services Limited (WTTIL), the cell tower arm of TTSL, for the purchase, installation and maintenance of 200 of our GenSys products.

We continue to develop future iterations of these products aligned with our evolving product roadmap.



## **Table of Contents**

In connection with the development of our GenSys platform, we continue to develop our high-temperature (180°C) polybenzimidazole (PBI) combined heat and power fuel cell system for light commercial and residential applications producing high quality heat and supplemental electricity. We partnered with the U.S. Department of Energy and National Grid to conduct the first field trial of the high-temperature GenSys product in 2009. Learning from the field trial will help determine system refinements for incorporation into the next-generation system design.

Additionally in 2009, we continued to manufacture and support our GenCore® product, a hydrogen fueled PEM fuel cell system to provide back-up power for critical infrastructure. We continue to work with certain established customers on initiatives related to this product.

### ***Product Support & Services***

To promote fuel cell adoption and maintain post-sale customer satisfaction, we offer a range of service and support options. These options include installation, commissioning, remote monitoring, product manuals, as well as on-site technical support.

Additionally, GenDrive product support and services may also include customer training and available lift truck dealer networks service personnel. Such personnel may assist with the commissioning and installation of GenDrive products and, in some cases, regularly scheduled preventative maintenance.

Our GenSys product support and service is provided by our Indian organization, Plug Power Energy India Private Limited (Plug Power India), an affiliate of Plug Power Inc. Services that can be offered include installation, commissioning, preventive and corrective maintenance, technical support hotline, engineering escalation, training, and remote monitoring of fleet performance. Additionally, Plug Power has entered into a strategic agreement with Hindustan Petroleum Corporation Limited (HPCL) to ensure proper fuel support at all remote cell tower locations in India.

### ***Markets/Geography & Order Status***

Our commercial sales for GenDrive products are in the material handling market, which primarily consist of large fleet, multi-shift operations in high-volume manufacturing and high-throughput distribution centers. In 2009, all of our GenDrive product installations were in North America.

We received 584 orders for our GenDrive product during the year ending December 31, 2009. Backlog on December 31, 2009 was 654 units representing approximately \$15.6 million in billable value including approximately \$700,000 related to 20 GenDrive products that were awarded under various government projects that remain unfunded as of December 31, 2009. Backlog on December 31, 2008 was 341 units representing approximately \$6.4 million in billable value which includes approximately \$1.1 million related to 45 GenDrive products that were previously funded under various government projects.

<u>GenDrive</u>	<b>2009</b>	<b>2008</b>
Shipments	271	132
Cancellations	-	4

Edgar Filing: PLUG POWER INC - Form 10-K

Orders	584	358
Backlog	654	341

6

---

**Table of Contents**

The assembly of GenDrive products that we sell is performed primarily at our manufacturing facility in Latham, New York. Currently, the supply and manufacture of several critical components used in our products are performed by sole-sourced third-party vendors in the U.S. and Canada.

Our commercial sales for GenSys products are in the prime power market segments in rural locations where the grid is unreliable or non-existent. In 2009, all orders for our GenSys product were received from India.

We received an order for 200 of our GenSys products during the year ending December 31, 2009. Backlog on December 31, 2009 was 199 units representing approximately \$6.9 million in billable value. We satisfied our orders for our GenSys product during the year ending December 31, 2008; therefore, there was no backlog on December 31, 2008.

<u>GenSys</u>	<b>2009</b>	<b>2008</b>
Shipments	1	5
Cancellations	-	-
Orders	200	5
Backlog	199	-

Plug Power India signed a five-year strategic manufacture and supply agreement with SFO Technologies (a NeST Group Company) in 2009 for our GenSys product. The Indian manufacturing relationship allows for the export of our GenSys product to key markets in India, Africa and Asia.

Our commercial sales of GenCore stationary back-up power product primarily support the telecommunications industry. We received 2 orders during the year ending December 31, 2009. Backlog on December 31, 2009 was 10 units representing approximately \$130,000 in billable value. Backlog on December 31, 2008 was 140 units representing approximately \$1.8 million in billable value. On February 23, 2009, our Distributor Agreement with IST Telecom expired; 100 units that had been ordered pursuant to this Distributor Agreement and in backlog have been cancelled. We continue to consider and may accept new orders for GenCore product as received.

<u>GenCore</u>	<b>2009</b>	<b>2008</b>
Shipments	31	146
Cancellations	101	7
Orders	2	109
Backlog	10	140

The assembly of GenCore products that we sell is performed primarily at our manufacturing facility in Latham, New York. Currently, the supply and manufacture of several critical components used in our products are performed by sole-sourced third-party vendors in the U.S. and Canada.

Under all product lines, we have accepted orders that require certain conditions or contingencies to be satisfied prior to shipment, some of which are outside of our control. Historically, shipments made against these orders can occur between thirty (30) days and twenty-four (24) months from the date of acceptance of the order.



## **Table of Contents**

### ***Distribution, Marketing and Strategic Relationships***

We have developed strategic relationships with well-established companies in key areas including distribution, service, marketing, supply, technology development and product development. We sell our products worldwide through our direct product sales force, original equipment manufacturers (OEMs) and their dealer networks.

### ***Competition***

We are confronted by aggressive competition in all areas of our business. The markets we address for motive and stationary power are characterized by the presence of well-established commodity battery and combustion generator products in addition to several competing fuel cell companies. Over the past several years, there has been price competition in these markets. The principal competitive factors in the markets in which we operate include price, product features, relative price and performance, product quality and reliability, design innovation, marketing and distribution capability, service and support, and corporate reputation.

In the material handling market, we believe our GenDrive products have an advantage over lead acid batteries for customers who run high-throughput distribution centers with multi shift operations by offering increased productivity with lower operational costs. However, we expect competition in this space to intensify as competitors attempt to imitate our approach with their own offerings. Some of these current and potential competitors have substantial resources and may be able to provide such products and services at little or no profit or even at a loss to compete with our offerings.

In the prime power market, we believe our GenSys products have an advantage over diesel generators and advanced battery cycling for customers operating telecommunication towers in rural locations where the grid is unreliable or non-existent because of the lower cost of ownership due to reduced operating costs and fuel costs. We expect that competition will continue to be a combined solution of diesel generators and advanced battery cycling. The attractiveness of the value proposition in telecom markets fluctuates with the cost of diesel fuel versus LPG.

### ***Intellectual Property***

We believe that neither we nor our competitors can achieve a significant proprietary position on the basic technologies currently used in PEM fuel cell systems. However, we believe the design and integration of our system and system components, as well as some of the low-cost manufacturing processes that we have developed, is intellectual property that can be protected. Our intellectual property portfolio covers among other things: fuel cell components that reduce manufacturing part count; fuel cell system designs that lend themselves to mass manufacturing; improvements to fuel cell system efficiency, reliability and system life; and control strategies, such as added safety protections and operation under extreme conditions. In general, our employees are party to agreements providing that all inventions (whether patented or not) made or conceived while an employee of Plug Power, which are related to or result from work or research that Plug Power performs, will remain the sole and exclusive property of Plug Power.

During 2009 the U.S. Patent and Trademark Office issued 5 new patents to the Company. As of December 31, 2009 we have a total of 167 issued patents. We also have 41 U.S. patent applications pending, 6 Canadian patent applications pending and 17 other foreign patent applications pending. The number of pending patent applications decreased in 2009 as we continued our 2008 efforts to focus our intellectual property protection on our current product offerings. Additionally, as of December 31, 2009 we have 6 trademarks registered with the U.S. Patent and

Trademark Office.

8

---

## **Table of Contents**

Furthermore, as of December 31, 2009 there are 27 pending U.S. patent applications filed on behalf of Honda and 1 U.S. patent issued to Honda relating to joint development work on the Home Energy Station (HES) and to which we have certain rights.

### ***Government Regulation***

We do not believe that we will be subject to existing federal and state regulatory commissions governing traditional electric utilities and other regulated entities. Our products and their installations are, however, subject to oversight and regulation at the state and local level in accordance with state and local statutes and ordinances relating to, among others, building codes, fire codes, public safety, electrical and gas pipeline connections and hydrogen siting. The level of regulation may depend, in part, upon where a system is located. For example, the 2008 National Electrical Code (NEC) is a model code written by the National Fire Protection Association, or NFPA, that governs the electrical wiring of most homes, businesses and other buildings in the United States. The NEC has been adopted by local jurisdictions throughout the United States and is enforced by local officials, such as building and electrical inspectors. Article 692 of the NEC governs the installation of stationary fuel cell systems, such as our GenSys or GenCore products. Accordingly, all of our stationary products installed in a jurisdiction that has adopted the NEC are installed in accordance with Article 692.

In addition, product safety standards have been established by the American National Standards Institute (ANSI) covering the overall fuel cell system. Our GenCore product has been certified by independent third-parties to be in compliance with such ANSI standards and we will continue to assess our GenSys and GenDrive products and design them to ANSI standards in 2010. Other than these requirements, at this time we do not know what additional requirements, if any, each jurisdiction will impose on our products or their installation. We also do not know the extent to which any new regulations may impact our ability to distribute, install and service our products. As we continue distributing our systems to our target markets, the federal, state or local government entities may seek to impose regulations or competitors may seek to influence regulations through lobbying efforts.

### ***Raw Materials***

Although most components essential to our business are generally available from multiple sources, we currently obtain certain key components including, but not limited to, fuel cell stack materials and energy storage devices, from single or limited sources. In 2008, Plug Power signed a supply agreement with Ballard Power Systems (Ballard) through December 31, 2010. Under this agreement, Ballard has served as the exclusive supplier of fuel cell stacks for Plug Power's GenDrive product line.

We believe there are several component suppliers and manufacturing vendors whose loss to the Company could have a material adverse effect upon our business and financial condition. At this time, such vendors include, but are not limited to, Ballard. We attempt to mitigate these potential risks by working closely with these and other key suppliers on product introduction plans, strategic inventories, coordinated product introductions and internal and external manufacturing schedules and levels.



## **Table of Contents**

### ***Research and Development***

Because the fuel cell industry is characterized by its early state of adoption, our ability to compete successfully is heavily dependent upon our ability to ensure a continual and timely flow of competitive products, services, and technologies to the marketplace. We continue to develop new products and technologies and to enhance existing products in the areas of cost, size, weight, and in supporting service solutions in order to drive commercialization. We may expand the range of our product offerings and intellectual property through licensing and/or acquisition of third-party business and technology. Our research and development expense totaled \$16.3 million, \$35.0 million and \$39.2 million in 2009, 2008 and 2007, respectively. We also had cost of research and development contract revenue of \$12.4 million, \$21.5 million and \$19.0 million in 2009, 2008 and 2007, respectively. These expenses represent the cost of research and development programs that are partially funded under cost reimbursement research and development arrangements with third parties.

### ***Employees***

As of December 31, 2009, we had 212 employees.

### ***Financial Information About Geographic Areas***

Please refer to our Geographic Information included in our Consolidated Financial Statements and notes thereto included in Part II, Item 8: Financial Statements and Supplementary Data of this Form 10-K.

### ***Available Information***

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available free of charge, other than an investor's own internet access charges, on the Company's website with an internet address of [www.plugpower.com](http://www.plugpower.com) as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to the Securities and Exchange Commission (SEC). The information contained on our website is not included as a part of, or incorporated by reference into, this Annual Report on Form 10-K. The public may read and copy any materials the Company files with the SEC at the SEC's Public Reference Room at 450 Fifth Street, NW., Washington, DC 20549. The public may also obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The SEC's website address is <http://www.sec.gov>.

### **Item 1A. Risk Factors**

The following factors should be considered carefully in addition to the other information in this Form 10-K. Except as mentioned under "Quantitative and Qualitative Disclosure About Market Risk" and except for the historical information contained herein, the discussion contained in this Form 10-K contains forward-looking statements, within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve risks and uncertainties. Our actual results could differ materially from those discussed in this Form 10-K. Important factors that could cause or contribute to such differences include those discussed below, as well as those discussed elsewhere herein.



## **Table of Contents**

### **We have incurred losses, anticipate continuing to incur losses and might never achieve or maintain profitability.**

As of December 31, 2009 we had an accumulated deficit of \$680.4 million. We have not achieved profitability in any quarter since our formation and may continue to incur net losses until we can produce sufficient revenue to cover our costs. We anticipate that we will continue to incur losses until we can produce and sell our products on a large-scale and cost-effective basis. On October 8, 2009, we announced our path to profitability; however, we cannot guarantee when we will operate profitably, if ever. In order to achieve profitability, among other factors, management must successfully execute our planned path to profitability in the early adoption markets on which we are focused, the hydrogen infrastructure that is needed to support our growth readiness and cost efficiency must be available and cost efficient, we must increasingly shorten cycles in our product roadmap with the product reliability and performance our customers expect and successfully introduce our products into the market, we must accurately evaluate our markets for, and react to, competitive threats in both other technologies (such as advanced batteries) and our technology field, and we must continue to lower our products' build costs and lifetime service costs. If we are unable to successfully take these steps, we may never operate profitably, even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

### **We are still a development stage company and therefore have limited experience in manufacturing and marketing our products and, as a result, may be unable to successfully commercialize our products.**

We were formed in June 1997 to further the research and development of stationary fuel cell systems. While we delivered our initial GenSys product in the third quarter of 2001, our initial GenCore product in the fourth quarter of 2003 and our GenDrive product in the third quarter of 2007, we do not have extensive experience in manufacturing and marketing our products. Before investing in our common stock, you should consider the challenges, expenses and difficulties that we will face as a development stage company seeking to commercialize our new and existing products. In conjunction with our announced path to profitability, we intend to end development stage accounting as we commercialize our products; however, if we are unable to successfully commercialize our products, we may never be able to change our financial accounting practices, and that failure to successfully commercialize would have a material adverse effect on our business, prospects, financial condition and results of operations.

### **Our purchase orders may not ship, be commissioned or installed, or convert to revenue, in whole or in part; and our pending orders may not convert to purchase orders, in whole or in part.**

We have accepted orders from certain customers, which may include firm orders, stocking orders and orders that require certain conditions or contingencies to be satisfied prior to shipment or prior to commissioning or installation, some of which are outside of our control. Historically, shipments made against these orders have occurred between thirty (30) days and twenty-four (24) months from the date of acceptance of the order. Orders received during the year ended December 31, 2009 totaled 786 units. Backlog on December 31, 2009 was 863 units. Of the unit orders in backlog on December 31, 2009, orders for 166 units were older than 12 months. The time periods from receipt of an order to shipment date and installation vary widely and are determined by a number of factors, including the terms of the customer contract and the customer's deployment plan. Due to certain redesign elements to be satisfied prior to shipment of units under certain of our agreements, some of which are outside of our control, some or all of our orders may not ship or convert to revenue. We also have publicly discussed anticipated, pending orders





## **Table of Contents**

with potential customers; however, those potential customers may require certain conditions or contingencies to be satisfied prior to issuing a purchase order to the Company, some of which are outside of our control. Such conditions or contingencies that may be required to be satisfied before the Company's receipt of a purchase order may include, but are not limited to, successful product demonstrations or field trials. Some conditions or contingencies that are out of our control may include, but are not limited to, government tax policy, government funding programs, and government incentive programs. Additionally, some conditions and contingencies may extend for several years. We may have to compensate customers, by either reimbursement, forfeiting portions of associated revenue, or other methods depending on the terms of the customer contract, based on the failure on any of these conditions or contingencies. This could have an adverse impact on our revenue and cash flow.

### **Our stock price has been and could remain volatile.**

The market price of our common stock has historically experienced and may continue to experience significant volatility. In 2009 the market price of our common stock fluctuated from a high of \$1.19 per share in the fourth quarter of 2009 to a low of \$0.67 per share in the third quarter of 2009. 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 securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. In addition, we may be subject to additional 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.

### **A failure to comply with NASDAQ's listing standards could result in the delisting of our common stock by NASDAQ from the NASDAQ Global Market and severely limit the ability to trade our common stock.**

Our common stock is currently traded on the NASDAQ Global Market. Under NASDAQ's listing maintenance standards, if the closing bid price of our common stock is under \$1.00 per share for 30 consecutive trading days, NASDAQ will notify us that we may be delisted from the NASDAQ Global Market. If the closing bid price of our common stock does not thereafter regain compliance for a minimum of ten consecutive trading days during the 180 days following notification by NASDAQ, NASDAQ may delist our common stock from trading on the NASDAQ

Global Market. On December 8, 2009, we were notified by NASDAQ that we were not in compliance with the minimum bid price listing requirement and therefore had 180 days within which to regain compliance. On March 5, 2010, the per share price of our common stock closed at \$0.55 on the NASDAQ Global Market. There can be no assurance that our common stock will continue to remain eligible for trading on the NASDAQ Global Market. If our common stock is delisted and we are unable to list on another exchange, the ability to trade in our common stock would be severely, if not completely, limited.

## **Table of Contents**

**OJSC (Third Generation Company of the Wholesale Electricity Market) (OGK-3) has substantial control over us and could limit stockholders' ability to influence the outcome of key transactions, including a change of control.**

OGK-3 and its affiliates own approximately 34% of the outstanding shares of our common stock. As a result, these stockholders can significantly influence or control certain matters requiring approval by our stockholders, including the approval of mergers or other extraordinary transactions. The interests of these stockholders may differ from ours and these stockholders may vote in a way with which we disagree and which may be adverse to our interests. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control of our Company, could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our Company and might ultimately affect the market price of our common stock.

**If a substantial number of shares of the Company's common stock become available for sale and are sold in a short period of time, the market price of our common stock could decline.**

OGK-3 holds 44,626,939 shares of common stock, which represent in the aggregate approximately 34% of the Company's outstanding common stock. If OGK-3 or its affiliates sell substantial amounts of our common stock in the public market, the market price of our common stock could decrease significantly. The perception in the public market that OGK-3 might sell shares of common stock could also depress the trading price of our common stock. A decline in the price of shares of our common stock might impede our ability to raise capital through the issuance of additional shares of our common stock or other equity securities.

**Our GenDrive product is fueled by hydrogen and we do not control the availability of such fuel.**

We are dependant upon hydrogen suppliers for success with the commercialization of our GenDrive product. Although we will continue to work with hydrogen suppliers to mutually agree on terms for our customers, including, but not limited to, price of the hydrogen molecules, liquid hydrogen, hydrogen infrastructure and service costs, to the benefit of our GenDrive product value proposition, ultimately we have no control over such third parties. If hydrogen suppliers elect not to participate in the material handling market or are difficult to negotiate with, then that could negatively affect our sales and deployment of our GenDrive product.

**A viable market for our products may never develop or may take longer to develop than we anticipate.**

Our products represent emerging markets, and we do not know the extent to which our targeted customers will want to purchase them and whether end-users will want to use them. If a viable market fails to develop or develops more slowly than we anticipate, we may be unable to recover the losses we will have incurred to develop our products and may be unable to achieve profitability. The development of a viable market for our products may be impacted by many factors which are out of our control, including: (i) the cost competitiveness of our products; (ii) the future costs of natural gas, propane, hydrogen and other fuels expected to be used by our products; (iii) consumer reluctance to try a new product; (iv) consumer perceptions of our products safety; (v) regulatory requirements; (vi) barriers to entry created by existing energy providers; and (vii) the emergence of newer, more competitive technologies and products.

## **Table of Contents**

### **We may be unable to establish or maintain relationships with third parties for certain aspects of product development, manufacturing, distribution and servicing and the supply of key components for our products.**

We will need to enter into additional strategic relationships in order to complete our current product development and commercialization plans. We will also require partners to assist in the sale, servicing and supply of components for our anticipated products, which are in development. If we are unable to identify or enter into satisfactory agreements with potential partners, including those relating to the distribution, service and support of our anticipated products, we may not be able to complete our product development and commercialization plans on schedule or at all. We may also need to scale back these plans in the absence of needed partners, which would adversely affect our future prospects for development and commercialization of future products. In addition, any arrangement with a strategic partner may require us to issue a significant amount of equity securities to the partner, provide the partner with representation on our board of directors and/or commit significant financial resources to fund our product development efforts in exchange for their assistance or the contribution to us of intellectual property. Any such issuance of equity securities would reduce the percentage ownership of our then current stockholders. While we have entered into relationships with suppliers of some key components for our products, we do not know when or whether we will secure supply relationships for all required components and subsystems for our products, or whether such relationships will be on terms that will allow us to achieve our objectives. Our business, prospects, results of operations and financial condition could be harmed if we fail to secure relationships with entities which can develop or supply the required components for our products and provide the required distribution and servicing support. Additionally, the agreements governing our current relationships allow for termination by our partners under certain circumstances, some of which are beyond our control. If any of our current strategic partners were to terminate any of its agreements with us, there could be a material adverse impact on the development and commercialization of our products and the operation of our business, financial condition, results of operations and prospects.

### **We rely on our partners to develop and provide components for our products.**

A supplier's failure to develop and supply components in a timely manner or at all, or to develop or supply components that meet our quality, quantity or cost requirements, or our inability to obtain substitute sources of these components on a timely basis or on terms acceptable to us, could harm our ability to manufacture our products. In addition, to the extent that our supply partners use technology or manufacturing processes that are proprietary, we may be unable to obtain comparable components from alternative sources. We have supply agreements with certain key suppliers, including, but not limited to, Ballard Power Systems, that we rely on for critical components in our products and there are numerous other components for our products that are sole sourced.

### **We have not developed and produced certain products that we have agreed to sell to some of our customers.**

We have not developed or produced certain products that are required by some of our sales and customer agreements. There can be no assurance that we will complete development of products meeting specifications required by our sales and customer agreements and deliver them on schedule. Pursuant to certain agreements, the customers have the right to provide notice to us if, in their good faith judgment, we have materially deviated from the agreement. Should a customer provide such notice, and we cannot mutually agree to a modification to the agreement, then the customer may have the right to terminate the agreement, which could adversely affect our future business.

## **Table of Contents**

### **We must lower the cost of our products and demonstrate their reliability.**

The initial capital cost of our fuel cell systems is currently significantly more than many established competing technologies. If we are unable to develop products that are competitive with competing technologies in terms of price, reliability and longevity, consumers will be unlikely to buy our products. The profitability of our products depends largely on material and manufacturing costs. We cannot guarantee that we will be able to lower these costs to the level where we will be able to produce a competitive product or that any product produced using lower cost materials and manufacturing processes will not suffer from a reduction in performance, reliability and longevity.

### **We face risks associated with our plans to market, distribute and service our products internationally.**

We intend to market, distribute and service our products internationally. We have limited experience developing and manufacturing our products to comply with the commercial and legal requirements of international markets. Our success in international markets will depend, in part, on our ability and that of our partners to secure relationships with foreign sub-distributors, and our ability to manufacture products that meet foreign regulatory and commercial requirements. Additionally, our planned international operations are subject to other inherent risks, including potential difficulties in enforcing contractual obligations and intellectual property rights in foreign countries and fluctuations in currency exchange rates. Also, to the extent our operations and assets are located in foreign countries, they are potentially subject to nationalization actions over which we will have no control.

### **Our international sales and operations may be adversely affected by local government laws, regulations and policies and changes to the same.**

Our international sales and operations are subject to risks associated with changes in local government laws, regulations and policies, including those related to tariffs and trade barriers, investments, taxation, exchange controls, employment regulations, and repatriation of earnings. Our international sales and operations are also sensitive to changes in foreign national priorities, including government budgets, as well as to political and economic instability. International transactions may involve increased financial and legal risks due to differing legal systems and customs in foreign countries. For example, as a condition of sale or to the awarding of a contract, some international customers require us to agree to offset arrangements, which may include in-country purchases, manufacturing and financial support arrangements. The contract may provide for penalties in the event we fail to perform in accordance with the offset requirements. In addition, as part of our globalization strategy, we have invested in certain countries which may carry high levels of currency, political and economic risk. While these factors or the impact of these factors are

difficult to predict, any one or more of them could adversely affect our business, financial condition or operating results.

**Delays in our product development could have a material impact on the commercialization of our products.**

If we experience delays in meeting our development goals, our products exhibit technical defects, or if we are unable to meet cost or performance goals, including power output, useful life and reliability, the commercialization of our products will be delayed. In this event, potential purchasers of our products may choose alternative technologies and any delays could allow potential competitors to gain market advantages. We cannot assure you that we will successfully meet our commercialization schedule in the future.



## **Table of Contents**

### **We may never complete the research and development of certain commercially viable products.**

We are a development stage company. Other than certain products within our GenCore, GenSys and GenDrive product families, which we believe to be commercially viable at this time, we do not know when or whether we will successfully complete research and development of other commercially viable products. If we are unable to develop additional commercially viable products, we will not be able to generate sufficient revenue to become profitable. The commercialization of our products depends on our ability to reduce the costs of our components and subsystems, and we cannot assure you that we will be able to sufficiently reduce these costs. In addition, the commercialization of our products requires achievement and verification of their overall reliability, efficiency and safety targets, and we cannot assure you that we will be able to develop, acquire or license the technology necessary to achieve these targets. Although we increased the number of units sold in our GenCore, GenSys and GenDrive product families, we must complete additional research and development to fill out product portfolios and deliver enhanced functionality and reliability before we will be able to manufacture commercially viable products in commercial quantities. In addition, while we are conducting tests to predict the overall life of our products, we may not have run our products over their projected useful life prior to large-scale commercialization. As a result, we cannot be sure that our products will last as long as predicted, resulting in possible warranty claims and commercial failures.

### **Failure of our field tests could negatively impact demand for our products.**

We are currently field-testing a number of our products, and we plan to conduct additional field tests in the future. We may encounter problems and delays during these field tests for a number of reasons, including the failure of our technology or the technology of third parties, as well as our failure to maintain and service our products properly. Many of these potential problems and delays are beyond our control. Any problem or perceived problem with our field tests could materially harm our reputation and impair market acceptance of, and demand for, our products.

### **Product liability or defects could negatively impact our results of operations.**

Any liability for damages resulting from malfunctions or design defects could be substantial and could materially adversely affect our business, financial condition, results of operations and prospects. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products resulting in a decline in demand for our products and could divert the attention of our management, which may materially and adversely affect our business, financial condition, results of operations and prospects.

**We face intense competition and may be unable to compete successfully.**

The markets for energy products are intensely competitive. Some of our competitors in the fuel cell sector are much larger than we are and may have the manufacturing, marketing and sales capabilities to complete research, development and commercialization of commercially viable fuel cell products more quickly and effectively than we can. In addition, there are many companies engaged in all areas of traditional and alternative energy generation in the United States, Canada and abroad, including, among others, major electric, oil, chemical, natural gas, battery, generator and specialized electronics firms, as well as universities, research institutions and foreign government-sponsored companies. These firms are engaged in forms of power generation such as solar and wind power, reciprocating engines and micro turbines, advanced battery technologies, as well as traditional grid-supplied electric power. Many of these entities have substantially greater financial, research and development, manufacturing and marketing resources than we do.

## **Table of Contents**

**Alternatives to our technology or improvements to traditional energy technologies could make our products less attractive or render them obsolete.**

Our products are among a number of alternative energy products being developed. A significant amount of public and private funding is currently directed toward development of micro turbines, solar power, wind power, advanced batteries and generator sets, fast charged technologies and other types of fuel cell technologies. Improvements are also being made to the existing electric transmission system and battery based systems. Technological advances in alternative energy products, improvements in the electric power grid, battery systems or other fuel cell technologies may make our products less attractive or render them obsolete.

**We depend on only a few customers for the majority of our revenues and the loss of any one or more of these customers, or a significant loss, reduction or rescheduling of orders from any of these customers, would have a material adverse effect on our business, financial condition and results of operations.**

We sell most of our products to a small number of customers, and while we are continually seeking to expand our customer base, we expect this will continue for the next several years. Any decline in business with these small numbers of customers could have an adverse impact on our business, financial condition and results of operations. Our future success is dependent upon the continued purchases of our products by a small number of customers. Any fluctuations in demand from such customers or other customers may negatively impact our business, financial condition and results of operations. If we are unable to broaden our customer base and expand relationships with potential customers, our business will continue to be impacted by unanticipated demand fluctuations due to our dependence on a small number of customers. Unanticipated demand fluctuations can have a negative impact on our revenues and business, and an adverse effect on our business, financial condition and results of operations. In addition, our dependence on a small number of major customers exposes us to numerous other risks, including: (i) a slowdown or delay in a customer's deployment of our products could significantly reduce demand for our products; (ii) reductions in a single customer's forecasts and demand could result in excess inventories; (iii) the current economic crisis could negatively affect one or more of our major customers and cause them to significantly reduce operations, or file for bankruptcy; (iv) consolidation of customers can reduce demand as well as increase pricing pressure on our products due to increased purchasing leverage; (v) each of our customers has significant purchasing leverage over us to require changes in sales terms including pricing, payment terms and product delivery schedules; and (vi) concentration of accounts receivable credit risk, which could have a material adverse effect on our liquidity and financial condition if one of our major customers declared bankruptcy or delayed payment of their receivables.

**The hydrocarbon fuels and other raw materials on which our products rely may not be readily available or available on a cost-effective basis.**

Our products depend largely on the availability of natural gas, liquid propane and hydrogen gas. If these fuels are not readily available or if their prices are such that energy produced by our products costs more than energy provided by other sources, then our products could be less attractive to potential users and our products' value proposition could be negatively affected. In addition, platinum is a key material in our PEM fuel cells. Platinum is a scarce natural resource and we are dependent upon a sufficient supply of this commodity. Any shortages could adversely affect our ability to produce commercially viable fuel cell systems and significantly raise our cost of producing our fuel cell systems.

## **Table of Contents**

### **We may have difficulty managing change in our operations.**

We continue to undergo rapid change in the scope and breadth of our operations as we advance the development and commercialization of our products. Such rapid change is likely to place a significant strain on our senior management team and other resources. We will be required to make significant investments in our engineering, logistics, financial and management information systems and to motivate and effectively manage our employees. Our business, prospects, results of operations and financial condition could be harmed if we encounter difficulties in effectively managing the budgeting, forecasting and other process control issues presented by such a rapid change.

### **Our future plans could be harmed if we are unable to attract or retain key personnel.**

We have attracted a highly skilled management team and specialized workforce, including scientists, engineers, researchers, manufacturing, marketing and sales professionals. Our future success will depend, in part, on our ability to attract and retain qualified management and technical personnel. We do not know whether we will be successful in hiring or retaining qualified personnel. Our inability to hire qualified personnel on a timely basis, or the departure of key employees, could materially and adversely affect our development and commercialization plans and, therefore, our business prospects, results of operations and financial condition.

### **Provisions in our charter documents and Delaware law may prevent or delay an acquisition of us, 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: (i) authorize the issuance of up to 5,000,000 shares of preferred stock in one or more series without a stockholder vote; (ii) limit stockholders' ability to call special meetings; (iii) 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 (iv) 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.

**Adverse changes in general economic conditions in the United States or any of the major countries in which we do business could adversely affect our operating results.**

As a global company, we are subject to the risks arising from adverse changes in global economic conditions. For example, as a result of the ongoing financial crisis in the credit markets, softness in the housing markets, difficulties in the financial services sector and continuing economic uncertainties, the direction and relative strength of the U.S. economy has become increasingly uncertain. If economic growth in the United States and other countries continues to slow or recede, our current or potential customers may delay or reduce technology purchases. This could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies and increased price competition, which could materially and adversely affect our business, results of operations and financial condition.

## **Table of Contents**

**We have no experience manufacturing our products on a large-scale commercial basis and may be unable to do so.**

To date, we have focused primarily on research, development and low volume manufacturing and have no experience manufacturing our products on a large-scale commercial basis. In 2000, we completed construction of our 50,000 square foot manufacturing facility and have continued to develop our manufacturing capabilities and processes. In 2009, we engaged a contract manufacturer in India to augment our manufacturing capabilities. We do not know whether or when we will be able to develop efficient, low-cost manufacturing capabilities and processes that will enable us to manufacture our products in commercial quantities while meeting the quality, price, engineering, design, and production standards required to successfully market our products. Our failure to develop such manufacturing processes and capabilities could have a material adverse effect on our business, financial condition and results of operations. Even if we are successful in developing our manufacturing capabilities and processes, we do not know whether we will do so in time to meet our product commercialization schedule or to satisfy the requirements of our distributors or customers.

**Our financial results could be negatively impacted by impairments of goodwill or other intangible assets required by Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) No. 350, Intangibles – Goodwill and Other and the application of future accounting policies or interpretations of existing accounting policies.**

In accordance with FASB ASC No. 350, we perform an annual assessment on goodwill and other intangible assets for impairment and also an assessment if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. A downward revision in the fair value of one of our acquired businesses could result in impairments of goodwill under FASB ASC No. 350 and non-cash charges. Any charge resulting from the application of FASB ASC No. 350 could have a significant negative effect on our reported net loss. In addition, our financial results could be negatively impacted by the application of existing and future accounting policies or interpretations of existing accounting policies, any continuing impact of FASB ASC No. 350 or any negative impact relating to the application of FASB ASC No. 360-10-35-15, Impairment or Disposal of Long-Lived Assets.

**Regulatory changes may affect demand for our products.**

The market for electric power generation products is heavily influenced by federal, state and international governmental regulations and policies. A change in the current regulatory policies could result in a significant reduction in the demand for our products or could deter further investment in the research and development of

alternative energy sources, including fuel cells. Government regulatory changes may affect the market for our products. Similarly, utility companies could place barriers on our entry into the marketplace where customers depend on traditional grid supplied energy, such as the fees that may be charged to industrial companies for disconnecting from the grid or for using less electricity and this could affect customers' decisions. The imposition of such fees could increase the cost to grid-connected customers of using our products and could make our products less desirable, thereby harming our revenue and profitability.



## **Table of Contents**

### **Our business may become subject to future government regulation, which may impact our ability to market our products.**

Our products are subject to certain federal, local, and non-U.S. laws and regulations, including, for example, state and local ordinances relating to building codes, public safety, electrical and gas pipeline connections, hydrogen transportation and siting and related matters. Further, as products are introduced into the market commercially, governments may impose new regulations. We do not know the extent to which any such regulations may impact our ability to distribute, install and service our products. Any regulation of our products, whether at the federal, state, local or foreign level, including any regulations relating to installation and servicing of our products, may increase our costs and the price of our products.

### **Our products use flammable fuels that are inherently dangerous substances.**

Our fuel cell systems use natural gas, liquid propane and hydrogen gas in catalytic reactions, which produce less heat than a typical gas furnace. While our products do not use this fuel in a combustion process, natural gas, liquid propane and hydrogen gas are flammable fuels that could leak in a home or office and combust if ignited by another source. Further, while we are not aware of any accidents involving our products, any such accidents involving our products or other products using similar flammable fuels could materially suppress demand for, or heighten regulatory scrutiny of, our products.

### **We may not be able to identify suitable acquisition candidates; and if we do identify suitable candidates, we may not be able to acquire them on commercially acceptable terms or at all.**

As part of our business strategy we may engage in acquisitions that we believe will provide us with complementary technologies, products, channels, revenue streams, expertise and/or other valuable assets. Future acquisitions may be difficult to integrate, add additional burden to our management and reduce the percentage ownership of our stockholders. If we acquire another company, we may not be able to successfully integrate the acquired business into our existing business in a timely and non-disruptive manner. We may have to devote a significant amount of time, management and financial resources to do so. Even with this investment of management and financial resources, an acquisition may not produce the desired revenues, earnings or business synergies. In addition, an acquisition involving our stock may reduce the percentage ownership of our then current stockholders. If we fail to integrate the acquired business effectively or if key employees of that business leave, the anticipated benefits of the acquisition would be jeopardized. The time, capital, management and other resources spent on an acquisition that fails to meet our expectations could cause our business and financial condition to be materially and adversely affected. In addition, from an accounting perspective, acquisitions can lead to non-recurring charges and amortization or impairment of significant amounts of intangible assets that could adversely affect our results of operations.



## **Table of Contents**

### **We may not be able to protect important intellectual property and we could incur substantial costs defending against claims that our products infringe on the proprietary rights of others.**

PEM fuel cell technology was first developed in the 1950s, and fuel processing technology has been practiced on a large scale in the petrochemical industry for decades. Accordingly, we do not believe that we can establish a significant proprietary position in the fundamental component technologies in these areas. However, our ability to compete effectively will depend, in part, on our ability to protect our proprietary system-level technologies, systems designs and manufacturing processes. We rely on patents, trademarks, and other policies and procedures related to confidentiality to protect our intellectual property. However, some of our intellectual property is not covered by any patent or patent application. Moreover, we do not know whether any of our pending patent applications will issue or, in the case of patents issued or to be issued, that the claims allowed are or will be sufficiently broad to protect our technology or processes. Even if all of our patent applications are issued and are sufficiently broad, our patents may be challenged or invalidated. We could incur substantial costs in prosecuting or defending patent infringement suits or otherwise protecting our intellectual property rights. While we have attempted to safeguard and maintain our proprietary rights, we do not know whether we have been or will be completely successful in doing so. Moreover, patent applications filed in foreign countries may be subject to laws, rules and procedures that are substantially different from those of the United States, and any resulting foreign patents may be difficult and expensive to enforce. In addition, we do not know whether the U.S. Patent & Trademark Office will grant federal registrations based on our pending trademark applications. Even if federal registrations are granted to us, our trademark rights may be challenged. It is also possible that our competitors or others will adopt trademarks similar to ours, thus impeding our ability to build brand identity and possibly leading to customer confusion. We could incur substantial costs in prosecuting or defending trademark infringement suits.

Further, our competitors may independently develop or patent technologies or processes that are substantially equivalent or superior to ours. If we are found to be infringing third party patents, we could be required to pay substantial royalties and/or damages, and we do not know whether we will be able to obtain licenses to use such patents on acceptable terms, if at all. Failure to obtain needed licenses could delay or prevent the development, manufacture or sale of our products, and could necessitate the expenditure of significant resources to develop or acquire non-infringing intellectual property.

### **Asserting, defending and maintaining our intellectual property rights could be difficult and costly and failure to do so may diminish our ability to compete effectively and may harm our operating results.**

We may need to pursue lawsuits or legal action in the future to enforce our intellectual property rights, to protect our trade secrets and domain names, and to determine the validity and scope of the proprietary rights of others. If third parties prepare and file applications for trademarks used or registered by us, we may oppose those applications and be required to participate in proceedings to determine the priority of rights to the trademark. Similarly, competitors may have filed applications for patents, may have received patents and may obtain additional patents and proprietary rights relating to products or technology that block or compete with ours. We may have to participate in interference proceedings to determine the priority of invention and the right to a patent for the technology. Litigation and interference proceedings, even if they are successful, are expensive to pursue and time consuming, and we could use a substantial amount of our financial resources in either case.

**We rely, in part, on contractual provisions to protect our trade secrets and proprietary knowledge.**

Confidentiality agreements to which we are party may be breached, and we may not have adequate remedies for any breach. Our trade secrets may also be known without breach of such agreements or may be independently developed by competitors. Our inability to maintain the proprietary nature of our technology and processes could allow our competitors to limit or eliminate any competitive advantages we may have.

## **Table of Contents**

### **Our government contracts could restrict our ability to effectively commercialize our technology.**

Some of our technology has been developed with state and federal government funding in the United States, Canada and other countries. The United States and Canadian governments have a non-exclusive, royalty-free, irrevocable world-wide license to practice or have practiced any of our technology developed under contracts funded by the respective government. In some cases, government agencies in the United States or Canada can require us to obtain or produce components for our systems from sources located in the United States or Canada, respectively, rather than foreign countries. Our contracts with government agencies are also subject to the risk of termination at the convenience of the contracting agency, potential disclosure of our confidential information to third parties and the exercise of march-in rights by the government. March-in rights refer to the right of the United States or Canadian governments or government agency to license to others any technology developed under contracts funded by the government if the contractor fails to continue to develop the technology. The implementation of restrictions on our sourcing of components or the exercise of march-in rights could harm our business, prospects, results of operations and financial condition. In addition, under the Freedom of Information Act, any documents that we have submitted to the government or to a contractor under a government funding arrangement are subject to public disclosure that could compromise our intellectual property rights unless such documents are exempted as trade secrets or as confidential information and treated accordingly by such government agencies.

### **Item 1B. Unresolved Staff Comments**

We have received no written comments regarding our periodic or current reports from the staff of the Securities and Exchange Commission that were issued 180 days or more preceding the end of our 2009 fiscal year.

### **Item 2. Properties**

Our principal executive offices are located in Latham, New York. At our 36-acre campus, we own a 56,000 square foot research and development center, a 32,000 square foot office building and a 50,000 square foot manufacturing facility and believe that these facilities are sufficient to accommodate our anticipated production volumes for at least the next two years. Our principal executive office also leases a 25,000 square foot warehouse facility in Latham, New York.

In connection with the acquisitions of Cellex and General Hydrogen, we also lease two facilities in Richmond, British Columbia with combined square footage of approximately 70,200 square feet to accommodate office, prototyping, and research and development activities.

The Company also leases approximately 9,000, 6,000, 900 and 9,600 square feet of space in Ohio, Tennessee, Washington D.C. and India, respectively.

### **Item 3. Legal Proceedings**

In July 2008, Soroo Trading Development Company Ltd. (Soroo) filed a demand for arbitration against GE Fuel Cell Systems, LLC (GEFCS). Prior to GEFCS dissolution in 2006, the Company held a 40% membership interest and

GE Microgen, Inc. (GEM) held a 60% membership interest in GEFCS.

In January 2010, Sorooof requested, and GEM and Plug Power Inc. agreed, that the arbitration proceeding be administratively closed pending final resolution of the matter in United States District Court, Southern District of New York. On January 22, 2010, Sorooof filed a complaint in United States District Court, Southern District of New York naming, among others, Plug Power Inc., GEFCS, and GEM as defendants.

**Table of Contents**

Accordingly, while there continues to be on-going discussions between the parties, we believe that it is too early to determine (i) that there is likely exposure to an adverse outcome and (ii) whether or not the probability of an adverse outcome is more than remote.

**Item 4. Removed and Reserved****PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

During the years ended December 31, 2009 and 2008, we issued 607,553 and 379,189 shares of our common stock in connection with matching contributions under our 401(k) Savings & Retirement Plan. The issuance of these shares is exempt from registration under Section 3(a)(2) of the Securities Act of 1933, as amended.

*Market Information.* Our common stock is traded on the NASDAQ Global Market under the symbol PLUG. As of March 5, 2010, there were approximately 2,811 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 49,000. The following table sets forth high and low last reported sale prices for our common stock as reported by the NASDAQ Global Market for the periods indicated:

	<b>Sales prices</b>	
	<b>High</b>	<b>Low</b>
2009		
1st Quarter	\$ 1.10	\$ 0.68
2nd Quarter	\$ 1.14	\$ 0.73
3rd Quarter	\$ 0.89	\$ 0.67
4th Quarter	\$ 1.19	\$ 0.68
2008		
1st Quarter	\$ 4.17	\$ 2.52
2nd Quarter	\$ 3.58	\$ 2.32
3rd Quarter	\$ 2.91	\$ 0.90
4th Quarter	\$ 1.55	\$ 0.69

*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.



**Table of Contents**

*Five-Year Performance Graph.* Below is a line graph comparing the percentage change in the cumulative total return on the Company's common stock, based on the market price of the Company's common stock, with the total return of companies included within the NASDAQ Market Index and the companies included within the Russell 300 Technology Index for the period commencing December 31, 2004 and ending December 31, 2009. The calculation of the cumulative total return assumes a \$100 investment in the Company's common stock, the NASDAQ Market Index and the Russell 300 Technology Index on December 31, 2004 and the reinvestment of all dividends.

<b>Index</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
PLUG POWER INC.	100.00	83.96	63.67	64.65	16.69	11.62
RUSSELL 300 TECHNOLOGY INDEX	100.00	101.55	111.49	127.91	73.07	107.50
NASDAQ MARKET INDEX	100.00	101.37	111.03	121.92	72.49	104.31

See also Part III Item 12 in this Annual Report on Form 10-K for additional detail related to security ownership and related stockholder matters, and for additional detail on equity compensation plan matters.



**Table of Contents****Item 6. Selected 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 for 2009, 2008, 2007, 2006, and 2005 as set forth below are derived from the audited consolidated financial statements of the Company. The information is only a summary and you should read it in conjunction with the Company's audited consolidated financial statements and related notes and other financial information included herein and Management's Discussion and Analysis of Financial Condition and Results of Operations.

	<b>Years Ended December 31,</b>				
	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>
	<b>(in thousands, except per share data)</b>				
<b>Statements Of Operations:</b>					
Product and service revenue	\$ 4,833	\$ 4,667	\$ 3,082	\$ 2,657	\$ 4,881
Research and development contract revenue	7,460	13,234	13,189	5,179	8,606
<b>Total revenue</b>	<b>12,293</b>	<b>17,901</b>	<b>16,271</b>	<b>7,836</b>	<b>13,487</b>
Cost of product and service revenues	7,246	11,442	9,399	4,833	4,098
Cost of research and development contract revenues	12,433	21,505	19,045	7,637	12,076
Research and development expense	16,324	34,987	39,218	41,577	35,632
Selling, general and administrative expenses	15,427	28,333	19,323	12,268	8,973
Goodwill impairment charge		45,843			
Amortization of intangible assets	2,132	2,225	1,614		687
Other income (expense), net	560	4,734	11,757	8,169	(3,764 )
Net loss	\$ (40,709 )	\$ (121,700 )	\$ (60,571 )	\$ (50,310 )	\$ (51,743 )
Loss per share, basic and diluted	\$ (0.32 )	\$ (1.36 )	\$ (0.69 )	\$ (0.58 )	\$ (0.66 )
Weighted average number of common shares outstanding	129,111	89,383	87,342	86,100	78,463
<b>Balance Sheet Data:</b>					
<i>(at end of the period)</i>					
Unrestricted cash, cash equivalents and available-for-sale securities	\$ 62,541	\$ 104,688	\$ 165,701	\$ 269,123	\$ 97,563
Trading securities — auction rate debt securities	53,397	52,651			
<b>Total assets</b>	<b>164,185</b>	<b>209,112</b>	<b>268,392</b>	<b>307,920</b>	<b>139,784</b>
Borrowings under line of credit	59,375	62,875			
Current portion of long-term obligations	533	401	1,384		527
Long-term obligations	2,426	1,313	4,580	1,112	4,659
Stockholders' equity	88,269	125,864	248,900	294,528	124,955

Working capital	60,009	86,171	163,906	267,002	95,511
-----------------	--------	--------	---------	---------	--------

25

---

## **Table of Contents**

### **Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

The discussion contained in this Form 10-K contains forward-looking statements, within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, that involve risks and uncertainties. Our actual results could differ materially from those discussed in this Form 10-K. In evaluating these statements, you should review Part I, Item 1A: Risk Factors and our Consolidated Financial Statements and notes thereto included in Part II, Item 8: Financial Statements and Supplementary Data of this Form 10-K.

#### ***Overview***

Plug Power Inc. is a development stage enterprise involved in the design, development and manufacture of fuel cell systems for industrial off-road (forklift or material handling) markets and stationary power markets worldwide. We are a development stage enterprise because substantially all of the Company's resources and efforts are aimed at the discovery of new knowledge that could lead to significant improvement in fuel cell reliability and durability, and the establishment, expansion and stability of markets for the Company's products. The Company continues to experience significant net outflows of cash from operations and devotes significant efforts towards financial planning in order to forecast future cash spending and the ability to continue product research and development activities and expansion of markets for its products. We continue to leverage our unique fuel cell application and integration knowledge to identify early adopter markets for which we can design and develop innovative systems and customer solutions that provide superior value, ease-of-use, and environmental design. We have made significant progress in the material handling and stationary power markets and believe we have developed reliable products for our end customers.

In 2009, we successfully introduced a new GenDrive product offering to augment our product suite and allow full site conversions. We have sold, on commercial terms, product offerings to target customers including Walmart, FedEx Freight, Coca-Cola Bottling Co., Sysco Foods and Central Grocers. Our sales to Central Grocers and Sysco Foods involve greenfield conversion sites. Greenfield sites offer the potential for the greatest financial benefits to our customers by eliminating the need for customers to make capital investments in batteries and the associated chargers, storage and changing systems. Additionally in 2009, we continued to develop our low-temperature remote-prime power GenSys product to support telecommunications applications where grid power is unreliable or non-existent. As a result of successful field trials at a Tata Teleservices Ltd. (TTSL) cell tower site in remote India during 2008, we received an anchor order from WTTIL, the cell tower arm of TTSL, for 200 of our GenSys products. Furthermore, we continued to develop our high-temperature GenSys product and in 2009 started field trials of the high-temperature GenSys product with the U.S. Department of Energy and National Grid. Our learning from these field trials will help develop system refinements for incorporation into the next-generation system design.



## **Table of Contents**

### ***Recent Developments***

*Debt and Lease Arrangement.* In March, 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. for the purpose of financing its investment in property that was leased to Central Grocers beginning on April 1, 2009. On April 1, 2009, the Company began leasing this same equipment to its customer, Central Grocers. In July 2009, the Company signed a letter of credit with Key Bank in the amount of \$525,000. The standby letter of credit is required by the agreement negotiated between Air Products and Chemicals, Inc. (Air Products) and the Company to supply hydrogen infrastructure and hydrogen to Central Grocers at their distribution center. The standby letter of credit is collateralized by cash held in a restricted account.

In October 2009, the Company entered into a 15 month financing arrangement for an electrolyzer.

See Note 8 (Debt and Lease Arrangement) of the Consolidated Financial Statements for more detail.

*Commercialization Agreement.* On February 4, 2010, the Company signed a commercialization agreement with CITIC GuoAn Mengguli Power Science & Technology Co., Ltd. (MGL), a leader in advanced lithium-ion batteries and materials, for the joint marketing and sales of their co developed high power lithium-ion battery systems into automotive applications. In its on-going effort to improve performance and reduce cost of its GenDrive™ products for the material handling market, Plug Power began the development of a lithium based hybrid battery system to replace its nickel-metal hydride hybrid batteries. Based on the successful introduction of the lithium battery systems into GenDrive products, it became evident that other adjacent markets could also benefit from this sophisticated and configurable technology. Through this agreement, Plug Power and MGL will first introduce their products to the Chinese automotive industry, where New Energy sponsored programs are supporting the deployment of at least 500,000 hybrid and pure electric vehicles over the next four years.

*Shareholder Rights Plan.* On June 22, 2009, the Company adopted a Shareholder Rights Plan, the purpose of which is, among other things, to enhance the Board's ability to protect shareholder interests and to ensure that shareholders receive fair treatment in the event any coercive takeover attempt of the 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, the Company or a large block of the Company's Common Stock. The Shareholder Rights Plan was filed as an exhibit to the Company's Registration Statement on Form 8A and Form 8-K dated June 24, 2009, as previously filed with the Securities and Exchange Commission.

*Long Term Incentive Plan.* On October 28, 2009, the Compensation Committee recommended and the Board of Directors approved a Long Term Incentive (LTI) Plan pursuant to the terms of the Company's 1999 Stock Option and Incentive Plan. Designed as an incentive vehicle to support employee efforts, the LTI Plan seeks to increase shareholder value by encouraging Plug Power employees to continue to work diligently to further the Company's long term goals, particularly the recently announced three year plan to achieve profitability in 2012. See Note 14 (Employee Benefit Plans) of the Consolidated Financial Statements and the Company's Form 8-K dated October 28, 2009 as previously filed with the Securities and Exchange Commission for more detail.

*1999 Employee Stock Purchase Plan.* Effective July 1, 2009, the Company suspended this plan. Factors taken into consideration were the expense of administering the plan, participation rate and the introduction of the Company-wide stock option grant as an alternative means of promoting employee stock ownership.





## **Table of Contents**

### ***Results of Operations***

*Product and service revenue.* We defer recognition of product and service revenue at the time of shipment and recognize revenue as the continued service, maintenance and other support obligations expire.

Many of our initial sales of product contain multiple obligations that may include a combination of fuel cell systems, continued service, maintenance, fueling and other support. While contract terms generally require payment shortly after shipment or delivery and installation of the fuel cell system and are not contingent on the achievement of specific milestones or other substantive performance, the multiple obligations within our contractual arrangements are generally not accounted for separately based on our limited experience and lack of evidence of fair value of the different components. As a result, we defer recognition of product and service revenue and recognize revenue on a straight-line basis as the continued service, maintenance and other support obligations expire, which are generally for periods of twelve to thirty months, or which can extend over multiple years. In the case of our limited consignment sales, we do not begin recognizing revenue on a deferred basis until the customer has accepted the product, at which time the risks and rewards of ownership have transferred, the price is fixed and we have a reasonable expectation of collecting upon billing. See Critical Accounting Policies and Estimates Revenue Recognition.

As we gain experience, including field experience relative to service and warranty of our initial products, the fair values for the multiple elements within our future contracts may become determinable and we may, in future periods, recognize product revenue upon delivery or installation of the product, or we may continue to defer recognition, based on application of appropriate guidance within the Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) No. 605-25-25, Revenue Recognition Multiple-Element Arrangements Recognition, or changes in the manner in which we structure contractual agreements, including our agreements with distribution partners.

Product and service revenue for the year ended December 31, 2009 increased \$165,000 or 3.5%, to \$4.8 million from \$4.7 million for the year ended December 31, 2008. The increase is primarily related to an increase in non-deferred revenue partially offset by decreased system shipments and the revenue recognized on those shipments. The non-deferred revenue represents revenue associated with replacement parts or services not covered by service agreements or other similar types of sales where the Company has no continuing obligation after the parts are shipped or delivered or after services are rendered.

In the product and service revenue category, during the year ended December 31, 2009, we shipped 257 fuel cell systems (117 are related to sales to end customers and 140 were delivered to Central Grocers under a lease arrangement whereby Plug Power retains title and ownership of the equipment) as compared to 273 fuel cell systems during the year ended December 31, 2008. In the year ended December 31, 2009, we recognized \$1.7 million of revenue for products shipped or delivered or services rendered in the year ended December 31, 2009, which includes \$1.4 million of non-deferred revenue as compared to \$2.3 million of revenue recognized in the year ended December 31, 2008 for products shipped or delivered or services rendered in the year ended December 31, 2008, which includes \$1.1 million of non-deferred revenue. Additionally, in the year ended December 31, 2009 we recognized approximately \$3.1 million of product and services revenue originally deferred at December 31, 2008, whereas in the year ended December 31, 2008 we recognized \$2.4 million of revenue originally deferred at December 31, 2007.



## **Table of Contents**

Product and service revenue for the year ended December 31, 2008 increased \$1.6 million, or 51%, to \$4.7 million from \$3.1 million for the year ended December 31, 2007. The increase is related to increased system shipments and the revenue recognized on those shipments as well as an increase in non-deferred revenue. The non-deferred revenue represents revenue associated with replacement parts or services not covered by service agreements or other similar types of sales where the Company has no continuing obligation after the parts are shipped or delivered or after services are rendered.

In the product and service revenue category, during the year ended December 31, 2008, we shipped 273 fuel cell systems compared to 204 fuel cell systems during the year ended December 31, 2007. In the year ended December 31, 2008, we recognized \$2.3 million of revenue for products shipped or delivered or services rendered in the year ended December 31, 2008, which includes \$1.1 million of non-deferred revenue as compared to \$1.1 million of revenue recognized in the year ended December 31, 2007 for products shipped or delivered or services rendered in the year ended December 31, 2007, which includes \$365,000 of non-deferred revenue. Additionally, in the year ended December 31, 2008 we recognized approximately \$2.4 million of product and services revenue originally deferred at December 31, 2007, whereas in the year ended December 31, 2007 we recognized \$2.0 million of revenue originally deferred at December 31, 2006.

*Research and development contract revenue.* Research and development contract revenue primarily relates to cost reimbursement research and development contracts associated with the development of PEM fuel cell technology. We generally share in the cost of these programs with our cost-sharing percentages generally ranging from 20% to 50% of total project costs. Revenue from time and material contracts is recognized on the basis of hours expended plus other reimbursable contract costs incurred during the period. Revenue from fixed fee contracts is recognized on the basis of percentage of completion. We expect to continue certain research and development contract work that is directly related to our current product development efforts.

Research and development contract revenue for year ended December 31, 2009 was \$7.5 million compared to \$13.2 million in 2008. The decrease of \$5.8 million or 43.6% is primarily related to the completion and near completion of funded projects in both the United States and Canada as well as a delay in the timing of deliverables in new programs. In the research and development contract revenue category, during the twelve months ended December 31, 2009 we shipped 45 GenDrive fuel cell systems that were previously funded under various government projects.

Research and development contract revenue for the year ended December 31, 2008 was \$13.2 million compared to \$13.2 million in 2007. The acquisitions in 2007 increased research and development contract revenue \$2.2 million as a result of twelve full months of operations in 2008 versus 2007, offset by a decrease of \$2.2 million related to a completion of contracts from prior years. In the research and development contract revenue category, during the twelve months ended December 31, 2008 we shipped 5 GenSys fuel cell systems and 5 GenDrive fuel cell systems.

*Cost of product and service revenue.* Cost of product and service revenue includes the direct material and labor cost incurred in the manufacture of the products we sell as well as the labor and material costs incurred for product maintenance, replacement parts and service under our contractual obligations.



## **Table of Contents**

Cost of product and service revenue for the year ended December 31, 2009 decreased \$4.2 million, or 36.7%, to \$7.2 million compared to \$11.4 million in 2008. The decrease is attributable to \$2.3 million in inventory write-offs associated with the corporate restructuring plan announced in December 2008 and a decrease in product and service fuel cell system shipments from the prior year. There were 257 fuel cell system shipments for the year ended December 31, 2009 as compared to 273 for the year ended December 31, 2008. Further contributing to the decrease in 2009, 140 of the 257 fuel cell system shipments are being accounted for under a lease arrangement which commenced in the second quarter of 2009. Therefore, the cost recognized on those 140 shipments consists of depreciation of approximately \$206,000 in the year ended December 31, 2009.

Cost of product and service revenue for the year ended December 31, 2008 increased \$2.0 million to \$11.4 million compared to \$9.4 million in 2007. The increase was related to \$2.3 million in inventory write-offs associated with the corporate restructuring plan announced in December 2008, coupled with higher cost of product and service revenues recorded due to an increase in shipments in 2008. This was partially offset by one-time charges of \$2.0 million for certain future expected service and warranty costs for existing units in the field recorded in the second quarter of 2007. Also contributing to the increase was an increase in servicing costs of the larger installed base.

*Cost of research and development contract revenue.* Cost of research and development contract revenue includes costs associated with research and development contracts including: cash and non-cash compensation and benefits for engineering and related support staff, fees paid to outside suppliers for subcontracted components and services, fees paid to consultants for services provided, materials and supplies used and other directly allocable general overhead costs allocated to specific research and development contracts.

Cost of research and development contract revenue for the year ended December 31, 2009 decreased \$9.1 million, or 42.2%, to \$12.4 million compared to \$21.5 million in 2008. This decrease reflects a reduced effort on funded contracts due to the completion or near completion of several major contracts in the United States and Canada as well as a delay in the timing of deliverables for new programs.

Cost of research and development contract revenue for the year ended December 31, 2008 increased \$2.5 million to \$21.5 million from \$19.0 million in 2007. This increase is primarily related to a higher percentage of cost sharing on research and development contracts in 2008.

*Research and development expense.* Research and development expense includes: materials to build development and prototype units, cash and non-cash compensation and benefits for the engineering and related staff, expenses for contract engineers, fees paid to outside suppliers for subcontracted components and services, fees paid to consultants for services provided, materials and supplies consumed, facility related costs such as computer and network services, and other general overhead costs associated with our research and development activities.

Research and development expense for the year ended December 31, 2009 decreased \$18.7 million, or 53.3%, to \$16.3 million compared to \$35.0 million in 2008. This decrease was a direct result of the corporate restructuring plans announced in June and December of 2008, which included a reduced workforce and a reduction in non-strategic research and development projects.



## **Table of Contents**

Research and development expense decreased to \$35.0 million for the year ended December 31, 2008 from \$39.2 million in 2007. This decrease was a direct result of the corporate restructuring plans announced in June and December of 2008, which included a reduced workforce and a reduction in non-strategic research and development projects. This decrease was partially offset by an increase of \$2.0 million, primarily due to a full twelve month period of expense in 2008 related to the acquisition of Cellex and General Hydrogen versus a partial twelve month period in 2007.

*Selling, general and administrative expenses.* Selling, general and administrative expenses includes cash and non-cash compensation, benefits and related costs in support of our general corporate functions, including general management, finance and accounting, human resources, selling and marketing, information technology and legal services.

Selling, general and administrative expenses for the year ended December 31, 2009 decreased \$12.9 million, or 45.6%, to \$15.4 million compared to \$28.3 million in 2008. This decrease was a direct result of the corporate restructuring plans announced in June and December of 2008.

Selling, general and administrative expenses for the year ended December 31, 2008 increased \$9.0 million, or 46.6%, to \$28.3 million compared to \$19.3 million in 2007. Approximately \$7.0 million of the increase is related to the corporate restructuring plans announced in June and December of 2008. The remainder of the increase is a direct result of a full twelve month period of expense in 2008 related to the acquisition of Cellex and General Hydrogen, versus a partial twelve month period in 2007.

*Goodwill Impairment.* The Company performs its annual goodwill assessment under FASB ASC No. 350, Intangibles - Goodwill and Other, at the date of its fiscal year end. As a result of this assessment, during the year ended 2008, the Company determined that a goodwill impairment occurred and recorded an impairment charge of \$45.8 million. See Note 6 (Goodwill and Other Intangible Assets) of the Notes to Consolidated Financial Statements.

*Amortization of intangible assets.* Amortization of intangible assets represents the amortization associated with the Company's acquired identifiable intangible assets from Cellex and General Hydrogen, including acquired technology and customer relationships, which are being amortized over eight years.

Amortization of intangible assets decreased to \$2.1 million for the year ended December 31, 2009, compared to \$2.2 million for the year ended December 31, 2008. The decrease is related to foreign currency fluctuations.

Amortization of intangible assets increased to \$2.2 million for the year ended December 31, 2008, compared to \$1.6 million for the year ended December 31, 2007. The increase is related to a full twelve month period of amortization of intangible assets in 2008 as compared to a partial twelve month period in 2007.

*Interest and other income and net realized gains from available-for-sale securities.* Interest and other income and net realized gains from available-for-sale securities consists primarily of interest earned on our cash, cash equivalents, available-for-sale and trading securities, other income, and the net realized gain/loss from the sale of available-for-sale securities.





## **Table of Contents**

Interest and other income and net realized gains from available-for-sale securities decreased to \$1.7 million for the year ended December 31, 2009 from \$5.1 million for the year ended December 31, 2008. This decrease is primarily related to lower cash balances coupled with lower yields on our investments due to a declining rate environment. Total net realized gains/losses from the sale of available-for-sale securities was \$0 for the year ended December 31, 2009 and a net gain of approximately \$389,000 for the year ended December 31, 2008. Interest income on trading securities and available-for-sale securities for the year ended December 31, 2009 was approximately \$906,000 and \$307,000, respectively. Interest income on trading securities and available-for-sale securities for the year ended December 31, 2008 was approximately \$1.9 million and \$1.5 million, respectively. Also included in the year ended December 31, 2008 is a \$1.2 million gain relating to the termination of Technology Partnerships Canada (TPC) agreements as discussed in Note 10 (Repayable Government Assistance) of the Notes to Consolidated Financial Statements.

Interest and other income and net realized gains from available-for-sale securities decreased \$7.2 million to \$5.1 million for the year ended December 31, 2008 from \$12.3 million for the year ended December 31, 2007. This decrease is primarily related to lower cash balances coupled with lower yields on our investments due to a declining rate environment. In addition, the yield on auction rate debt securities declined significantly in 2008 as compared to 2007 due primarily to the impact of failed auctions related to these securities which began in February 2008. This was partially offset by a \$1.2 million gain relating to the termination of TPC agreements as discussed in Note 10 (Repayable Government Assistance) of the Notes to Consolidated Financial Statements. Total net realized gains/losses from the sale of available-for-sale securities was a gain of \$389,000 and \$118,000 for the years ended December 31, 2008 and 2007, respectively.

*Gain on auction rate debt securities repurchase agreement.* In December 2008, the Company entered into a Repurchase Agreement with the third-party lender such that the Company may require the third-party lender to repurchase the auction rate debt securities pledged as collateral for the Credit Line Agreement, at their par value, from June 30, 2010 through July 2, 2012. As a result of the Repurchase Agreement entered into with a third party lender in December 2008, the Company reclassified the auction rate debt securities from available-for-sale securities to trading securities. The Company has elected to record this item at its fair value in accordance with FASB ASC No. 825-10-25, Fair Value Option. At December 31, 2009, the fair value of this item is \$6.0 million. The change in fair value of \$4.2 million during the year ended December 31, 2009 was recorded as a loss in the consolidated statements of operations which is offset by the change in fair value of the auction rate debt securities held as collateral of \$4.2 million that is recorded as a gain in the consolidated statements of operations for the year ended December 31, 2009. At December 31, 2008, the fair value of this item was \$10.2 million and was recorded as a gain on auction rate debt securities repurchase agreement in the consolidated statements of operations. The change in the fair value of these trading securities from the date of their transfer into trading through December 31, 2008 was not significant.

*Impairment loss on available-for-sale securities.* Due to the liquidity issues in the credit and capital markets, the market for auction rate debt securities began experiencing auction failures in February 2008, and there have been no successful auctions for the securities held in our portfolio since the failures began. Given the lack of liquidity in the market for auction rate debt securities, the Company concluded that the estimated fair value of these securities has become lower than the cost of these securities, and, based on an analysis of the other-than-temporary impairment factors, management has determined that this difference represents a decline in fair value that is other-than-temporary. Accordingly, the Company recorded an other-than-temporary impairment charge of \$10.2 million in the twelve months ended December 31, 2008. There were no securities deemed other-than-temporarily impaired during 2009.



## **Table of Contents**

*Interest and other expense.* Interest and other expense consists of interest on repayable government assistance amounts related to the activities of Cellex and General Hydrogen, interest related to the Credit Line Agreement and long term debt, and foreign currency exchange gain/(loss).

Interest and other expense for the year ended December 31, 2009 was approximately \$1.1 million, compared to approximately \$401,000 for the year ended December 31, 2008. Interest expense related to the Credit Line Agreement was approximately \$915,000 for the year ended December 31, 2009 and was not significant for the year ended December 31, 2008.

Interest and other expense for the year ended December 31, 2008 was approximately \$401,000, compared to \$580,000 for the year ended December 31, 2007. The decrease is related to foreign currency exchange losses from our Canadian operations. Interest expense related to the Credit Line Agreement entered into in December 2008 was not significant.

*Income taxes.* We did not report a benefit for federal and state income taxes in the consolidated financial statements as the deferred tax asset generated from our net operating loss has been offset by a full valuation allowance because it is more likely than not that the tax benefits of the net operating loss carry forward will not be realized.

### ***Critical Accounting Estimates***

The preparation of financial statements in conformity with generally accepted accounting principles and related disclosures requires management to make estimates and assumptions.

We believe that the following are our most critical accounting estimates and assumptions the Company must make in the preparation of its consolidated financial statements and related disclosures:

*Revenue recognition:* We are a development stage enterprise currently performing field testing and selling and marketing of our products to a limited number of customers, including distribution center operators, manufacturing facilities, telecom, utilities, and government entities. Our fuel cell systems are designed to replace incumbent electric power technologies in material handling equipment, serve as complementary or replacement power in prime power applications and serve as complementary quality power sources in back-up applications. Our current product offerings are intended to offer complementary, quality power while demonstrating the market value of fuel cells as a preferred form of alternative distributed power generation. Subsequent enhancements to our initial product are expected to expand the market opportunity for fuel cells by lowering the installed cost, decreasing operating and maintenance costs, increasing efficiency, improving reliability, and adding features such as grid independence and co-generation as well as UPS applications.



## **Table of Contents**

We apply the guidance within FASB ASC No. 605-10-S99, Revenue Recognition Overall - SEC Materials, to our initial sales contracts to determine when to properly recognize revenue. Many of our initial sales of product contain multiple obligations that may include a combination of fuel cell systems, continued service, maintenance, a supply of hydrogen and other support. While contract terms generally stipulate that title and risk of ownership pass and require payment upon shipment or delivery of the fuel cell system, or acceptance in the case of certain consignment sales, and also stipulate that payment is not contingent on the achievement of specific milestones or other substantive performance, the multiple obligations within our contractual arrangements are generally not accounted for separately based on our limited experience and lack of evidence of fair value of the different components. As a result, we defer recognition of product and service revenue and recognize revenue on a straight-line basis over the stated contractual term, as the continued service, maintenance and other support obligations expire, which may be for periods of twelve to thirty months or which may extend over multiple years. In the case of our limited consignment sales, we do not begin recognizing revenue on a deferred basis until the customer has accepted the product, at which time the risks and rewards of ownership have transferred, the price is fixed and we have a reasonable expectation of collection upon billing. The costs associated with the product, service and other obligations are generally expensed as they are incurred.

As we gain experience, including field experience relative to service and warranty obligations based on the sales of our initial products, the fair values for the multiple elements within our future contracts may become determinable and we may, in future periods, recognize revenue upon shipment or delivery of the product or we may continue to defer recognition, based on application of appropriate guidance within FASB ASC No. 605-25-25, Revenue Recognition Multiple-Element Arrangements Recognition, or changes in the manner in which we structure contractual agreements, including our agreements with distribution partners.

Additionally, our research and development contract revenue primarily relates to cost reimbursement research and development contracts associated with the development of PEM fuel cell technology. The Company generally shares in the cost of these programs with our cost-sharing percentages generally ranging from 20% and 50% of total project costs. Revenue from time and material contracts is recognized on the basis of hours expended plus other reimbursable contract costs incurred during the period. Revenue from fixed fee contracts is recognized on the basis of percentage of completion.

*Valuation of long-lived assets:* We value long-lived assets at their fair value at the date of acquisition. We utilize third-party valuation experts in our assessments of the fair values of acquired long-lived assets and allocate purchase price to the acquired assets and liabilities assumed accordingly. We assess the impairment of long-lived assets, including identifiable intangible assets, whenever events or changes in circumstances indicate that the carrying value may not be recoverable and, for goodwill, at least annually. Factors we consider important that could trigger an impairment review include, but are not limited to, the following:



## **Table of Contents**

- significant underperformance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- our market capitalization relative to net book value.

When we determine that the carrying value of long-lived assets, including identifiable intangible assets, may not be recoverable based upon the existence of one or more of the above indicators of impairment, we would measure any impairment based upon the provisions of FASB ASC No. 350, Intangibles - Goodwill and Other and FASB ASC No. 360-10-35-15, Impairment or Disposal of Long-Lived Assets, as appropriate. Any resulting impairment loss could have a material adverse impact on our financial condition and results of operations.

Goodwill impairment testing is performed at the segment (or reporting unit) level. The Company's goodwill is evaluated at the entity level as there is only one reporting unit. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. Once goodwill has been assigned to reporting units, it no longer retains association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or organically grown, are available to support the value of the goodwill.

The Company performs its annual goodwill impairment assessment under FASB ASC No. 350, Intangibles - Goodwill and Other at the date of its fiscal year end or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. As of December 31, 2009, the Company had no goodwill on its consolidated balance sheet as a result of the full impairment charge recorded in 2008. If goodwill exists, our impairment test is based on a set of assumptions regarding discounted future cash flows, which represent the Company's best estimate of future performance at this time, as well as consideration of the Company's market capitalization.

The goodwill impairment analysis is dependent on many variables used to determine fair value of the Company overall and the fair value of the Company's assets and liabilities. Please see Note 6 (Goodwill and Other Intangible Assets) of the Notes to Consolidated Financial Statements for a description of the valuation methods and related estimates and assumptions used in our impairment testing. The complexity of the analysis does not permit a simplistic determination of the impact of changes in assumptions.

*Stock Based Compensation:* We recognize stock-based compensation expense associated with the vesting of share based instruments in the consolidated statements of operations. Determining the amount of stock-based compensation to be recorded requires us to develop estimates to be used in calculating the grant-date fair value of stock options. We calculate the grant-date fair values using the Black-Scholes valuation model. The Black-Scholes model requires us to make estimates of the following assumptions:





## **Table of Contents**

**Expected volatility** The estimated stock price volatility was derived based upon a blend of implied volatility (i.e. management's expectation of volatility) and the Company's actual historic stock prices over the expected life of the options, which represents the Company's best estimate of expected volatility.

**Expected option life** The Company's estimate of an expected option life was calculated in accordance with the simplified method for calculating the expected term assumption. The simplified method is a calculation based on the contractual life of the associated options.

**Risk-free interest rate** We use the yield on zero-coupon U.S. Treasury securities for a period that is commensurate with the expected life assumption as the risk-free interest rate.

The amount of stock-based compensation recognized during a period is based on the value of the portion of the awards that are ultimately expected to vest. FASB ASC No. 718-10-55, Compensation - Stock Compensation Overall Implementation and Guidance Illustrations, requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. The term "forfeitures" is distinct from "cancellations" or "expirations" and represents only the unvested portion of the surrendered option. We review historical forfeiture data and determine the appropriate forfeiture rate based on that data. We re-evaluate this analysis periodically and adjust the forfeiture rate as necessary. Ultimately, we will recognize the actual expense over the vesting period only for the shares that vest.

*Auction rate securities and auction rate debt securities repurchase agreement:* We value our auction rate debt securities and auction rate debt securities repurchase agreement based upon factors specific to these securities, including duration, tax status (taxable or tax-exempt), credit quality, the existence of insurance wraps, and the composition of the underlying student loans (Federal Family Education Loan Program or private loans). Assumptions are made about future cash flows based upon interest rate formulas as described in Note 3, Fair Value Measurements. Also, our valuation includes estimates of market data including yields or spreads of similar trading instruments, when available, or assumptions believed to be reasonable. Illiquid credit markets and volatile equity markets have combined to increase the uncertainty inherent in our estimates and assumptions. As future events cannot be determined with precision, actual results could differ significantly from our estimates.

## ***Recent Accounting Pronouncements***

A discussion of recently adopted and new accounting pronouncements is included in Note 2 (Summary of Significant Accounting Policies) of the Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.



**Table of Contents*****Liquidity and Capital Resources***

Although we anticipate incurring substantial additional losses, we believe that our current cash, cash equivalents and available-for-sale securities balances will provide sufficient liquidity to fund operations for at least the next twelve months including anticipated increased working capital needs. Our cash requirements depend on numerous factors, including completion of our product development activities, our ability to commercialize our energy products, market acceptance of our systems and other factors. We expect to devote substantial capital resources to continue our development programs directed at commercializing our energy products for worldwide use, building a sales base and expanding market channels, hiring and training production staff, developing and better utilizing our manufacturing capacity, production and research and development activities. We expect to pursue the expansion of our operations through internal growth and strategic acquisitions and expect that such activities will be funded from existing cash, cash equivalents, trading securities, available-for-sale securities, and the issuance of additional equity or debt securities or additional borrowings subject to market and other conditions. The failure to raise the funds necessary to finance our future cash requirements or consummate future acquisitions could adversely affect our ability to pursue our strategy and could negatively affect our operations in future periods.

Several key indicators of liquidity are summarized in the following table:

<b>(in thousands)</b>	<b>Years ended or at December 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Cash and cash equivalents at end of period	\$ 14,581	\$ 80,845	\$ 12,077
Trading securities — auction rate debt securities	53,397	52,651	-
Available-for-sale securities at end of period	47,960	23,844	153,624
Working capital at end of period	60,009	86,171	163,906
Net loss	40,709	121,700	60,571
Net cash used in operating activities	38,228	56,596	49,311
Purchase of property, plant and equipment	533	1,419	2,944

Included in trading securities and working capital at December 31, 2009 and 2008, respectively, is \$53.4 million and \$52.7 million of auction rate debt securities. The auction rate debt securities are secured by student loans which are generally guaranteed by the Federal government. These auction rate debt securities are structured to be tendered at par, at the investor's option, at auctions occurring every 27-30 days. However, due to the liquidity issues in the credit and capital markets, the market for auction rate debt securities began experiencing auction failures in February 2008 and there have been no successful auctions for the securities held in our portfolio since the failures began. We continue to receive interest on these securities, subject to an interest rate cap formula for each security as periodically adjusted in accordance with the respective securities agreement. At December 31, 2009, the interest rates ranged from 0.61% to 3.48% on the auction rate debt securities as compared to the interest rate range at December 31, 2008 from 1.55% to 3.43%.



## **Table of Contents**

The Company has pledged these securities as collateral to a third-party lender for a Credit Line Agreement (See Note 7, Credit Line Agreement and Auction Rate Debt Securities Repurchase Agreement) entered into in December 2008. Given the lack of liquidity in the market for auction rate debt securities, the fair value of these auction rate debt securities have become lower than their cost and, based on an analysis of other than temporary impairment factors, management has determined, beginning in the first quarter of 2008, that this difference represents a decline in value that is other-than-temporary. Accordingly, the Company recorded an other-than-temporary impairment charge of \$10.2 million for the year ended December 31, 2008 in the consolidated statements of operations. In December 2008, the Company entered into a Repurchase Agreement with a third-party lender such that the Company may require the third-party lender to repurchase the auction rate debt securities pledged as collateral for the Credit Line Agreement at their par value, from June 30, 2010 through July 2, 2012. The fair value of the Repurchase Agreement at its origination was \$10.2 million and was recorded as a gain in the 2008 consolidated statement of operations. The fair value of the Repurchase Agreement at December 31, 2009 was \$6.0 million. The change in fair value of approximately \$4.2 million during the year ended December 31, 2009 was recorded as a loss in the consolidated statements of operations which is offset by the change in fair value of the auction rate debt securities held as collateral of approximately \$4.2 million that is recorded as a gain for the year ended December 31, 2009.

We continue to monitor the market for auction rate debt securities and will be required to mark the securities to fair value which could negatively affect our financial condition, liquidity and reported operating results. We will also be monitoring and marking to fair value the auction rate debt securities repurchase agreement. The Company expects that the fair adjustments of the auction rate debt securities will generally be offset by the fair value adjustments of the auction rate debt securities repurchase agreement.

In May 2008, the Company filed a lawsuit against UBS Financial Services Inc. and UBS AG in the United States District Court, Northern District of New York, the financial advisor that placed the Company in certain auction rate debt securities held in the Company's investment portfolio. The lawsuit seeks a return of the \$62.9 million of Company funds UBS invested in auction rate debt securities in contravention to the Company's investment policy, among other damages.

On December 15, 2008, Plug Power Inc. (Plug or the Company) accepted an offer by UBS AG (UBS) of certain rights to cause UBS to purchase, at a future date, auction rate debt securities owned by the Company. The repurchase rights are offered in connection with UBS's obligations under settlement agreements with the U.S. Securities and Exchange Commission and other federal and state regulatory authorities. The offering, the settlement agreements, and the respective rights and obligations of the parties, are described in a prospectus issued by UBS dated October 7, 2008, File No. 333-153882 (the Prospectus). As a result of accepting UBS's offer, the Company can require UBS to repurchase at par value all of the auction rate debt securities held by the Company at any time during the period from June 30, 2010 through July 2, 2012 (if the Company's auction rate debt securities have not previously been sold by the Company or by UBS on its behalf), and pending litigation between the parties has been dismissed with prejudice.

In connection with the Prospectus offering, the Company also entered into a loan agreement with UBS Credit Corp. that provides the Company with a credit line of up to \$62.875 million with the Company's auction rate debt securities pledged as collateral. The Company has drawn down the full amount of the credit line. In accordance with the offering by UBS, the loan will be treated as a no net cost loan as defined in the Prospectus. The loan will bear interest at a rate equal to the average rate of interest paid to Plug Power on the pledged auction rate debt securities such that the net

interest cost to Plug Power will be zero. Though the loan is payable on demand, if UBS Credit Corp. should exercise its right to demand repayment of any portion of the loan prior to the date the Company can exercise its repurchase rights, UBS and certain of its affiliates will arrange for alternative financing on terms and conditions substantially the same as those contained in the loan. If alternative financing cannot be established, then UBS or one of its affiliates will purchase the Company's pledged auction rate debt securities at par. As a result, the loan and any alternative financing will not be payable by the Company prior to the time that the Company can require UBS to repurchase the pledged auction rate debt securities. Proceeds of sales of the Company's auction rate debt securities will first be applied to repayment of the credit line with the balance, if any, for the Company's account. UBS has previously provided investment management services for a portion of the Company's investment portfolio.

## **Table of Contents**

*Debt and Lease Arrangement.* In March, 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. for the purpose of financing its investment in property that was leased to Central Grocers beginning on April 1, 2009. On April 1, 2009, the Company began leasing this same equipment to its customer, Central Grocers. In July 2009, the Company signed a letter of credit with Key Bank in the amount of \$525,000. The standby letter of credit is required by the agreement negotiated between Air Products and Chemicals, Inc. (Air Products) and the Company to supply hydrogen infrastructure and hydrogen to Central Grocers at their distribution center. The standby letter of credit is collateralized by cash held in a restricted account.

In October 2009, the Company entered into a 15 month financing arrangement for an electrolyzer.

See Note 8 (Debt and Lease Arrangement) of the Consolidated Financial Statements for more detail.

Under Internal Revenue Code (IRC) Section 382, the use of loss carryforwards may be limited if a change in ownership of a company occurs. If it is determined that due to transactions involving the Company's shares owned by its 5 percent shareholders a change of ownership has occurred under the provisions of IRC Section 382, the Company's net operating loss carryforwards could be subject to significant IRC Section 382 limitations.

At December 31, 2009, the Company has approximately \$536.1 million in Federal and state net operating loss carryforwards and \$15 million in Federal research and experimentation tax credit carryforwards (of which \$5.7 million represents an uncertain tax position), which resulted in \$203.7 million and \$9.3 million, respectively, in deferred tax assets that are recorded on the Company's balance sheet at December 31, 2009. These deferred tax assets are fully reserved for through a valuation allowance. During the fourth quarter of 2009, as a result of certain equity transactions, the Company may have had an ownership change for IRC Section 382 purposes. If a change occurred in the fourth quarter, an IRC Section 382 limitation could result in as much as approximately \$458.6 million of the Company's Federal and state net operating loss carryforwards expiring prior to utilization, which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$174.3 million. Additionally, if a change in control occurred during the fourth quarter an IRC Section 382 limitation could result in as much as approximately \$15 million of Federal research and experimentation tax credit carryforwards expiring prior to utilization, which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$9.3 million. These decreases would have no impact on the Company's financial position, results of operations, or cash flows. However, these potential future tax benefits would no longer be available to the Company. The Company is in the process of completing a formal Section 382 study to determine if an ownership change has occurred.

Our cash requirements depend on numerous factors, including completion of our product development activities, ability to commercialize our fuel cell systems, market acceptance of our systems and other factors. We expect to pursue the expansion of our operations through internal growth and strategic acquisitions. As of December 31, 2009, we had cash and cash equivalents of \$14.6 million, available-for-sale securities of \$48.0 million and working capital of \$60.0 million.

During the year ended December 31, 2009, cash used for operating activities was \$38.2 million, consisting primarily of a net loss of \$40.7 million and a \$324,000 gain on repayable government assistance offset, in part, by non-cash expenses in the amount of \$8.0 million, including \$5.8 million for amortization and depreciation, \$1.9 million for stock based compensation, \$504,000 for loss on disposals of property, plant and equipment and \$93,000 in bad debt. Cash used for investing activities for the year ended December 31, 2009 was \$25.8 million, consisting of \$3.5 million in proceeds from trading securities and \$223,000 of proceeds from disposals of property, plant and equipment offset by \$24.2 million of maturities (net of purchases) of available-for-sale securities, \$533,000 used to purchase property,

plant and equipment, \$2.5 million used as an investment in leased property, and \$2.3 million in restricted cash. Cash used for financing activities was approximately \$2.4 million consisting of \$3.5 million in repayment of borrowings under line of credit, \$534,000 for the purchase of treasury stock and \$230,000 in principal payments on long-term debt and line of credit partially offset by proceeds from borrowings of long term debt and employee stock purchase plan of \$1.9 million.

We have financed our operations from inception through December 31, 2009 primarily from the sale of equity (including those related to stock-based compensation less stock issuance costs), which has provided cash in the amount of \$636.4 million. Also since inception, cumulative net cash used in operating activities has been \$492.5 million, and cash used in investing activities has been \$180.7 million, including our purchase of property, plant and equipment of \$38.9 million, our net investments in available-for-sale securities in the amount of \$110.7 million, and cash used for acquisitions of \$19.3 million, net of cash received.



## **Table of Contents**

Subsequent to December 31, 2009, we issued 2,028,572 shares of common stock for the achievement of performance objectives in 2009.

Other significant transactions impacting our liquidity and capital resources have been as follows:

### *Mergers & Acquisitions*

On April 3, 2007, the Company completed the acquisition of all of the outstanding shares of Cellex, a development stage enterprise, for an aggregate purchase price, including acquisition costs, of \$46.1 million. As part of this acquisition, we acquired technology and certain other assets of Cellex. The entire \$10 million balance of intangible assets has been assigned to acquired technology, which is being amortized over 8 years. The results of Cellex's operations have been included in the consolidated financial statements since that date. Cellex, based in Richmond, British Columbia, develops and commercializes fuel cell solutions that replace the industrial lead acid battery system used today in powering electric lift truck fleets in large-scale distribution centers.

On May 4, 2007, the Company completed the acquisition of all of the outstanding shares of General Hydrogen, a development stage enterprise, for an aggregate purchase price of \$12.4 million. The purchase price includes the settlement of \$3.0 million in senior secured loans previously made by the Company to General Hydrogen, as well as 571,429 warrants granted to shareholders of General Hydrogen that were valued at \$1.4 million. The warrants become exercisable when Plug Power's Common Stock trades at a volume weighted average price of \$7.00 or more for 10 consecutive trading days. The warrants carry an exercise price of \$.01 per share and expire four years from the date of issuance. As part of this acquisition, we acquired technology and customer relationships and certain other assets of General Hydrogen. Of the \$6.9 million of intangible assets, \$5.9 million has been assigned to acquired technology and \$1.0 million has been assigned to customer relationships, both of which are being amortized over 8 years. The results of General Hydrogen's operations have been included in the consolidated financial statements since May 4, 2007. General Hydrogen is located in Richmond, British Columbia, Canada within close proximity to Cellex.

### *Public Offerings*

In November 1999, we completed an initial public offering of 6,782,900 shares of common stock, which includes additional shares purchased pursuant to exercise of the underwriters' over allotment option. We received proceeds of \$93.0 million, which was net of \$8.7 million of expenses and underwriting discounts relating to the issuance and distribution of the securities.

In July 2001, we completed a follow-on public offering of 4,575,000 shares of common stock, which includes additional shares purchased pursuant to exercise of the underwriters' over allotment option. We received proceeds of \$51.6 million, which was net of \$3.3 million of expenses and underwriting discounts relating to the issuance and distribution of the securities.

In November 2003, the Company completed a public offering of 11,700,000 shares of common stock. We received proceeds of \$55.0 million, net of \$3.5 million of expenses and placement fees relating to the issuance and distribution of the securities.

In August 2005, the Company completed a public offering of 12,000,000 shares of common stock. We received proceeds of \$70.6 million, net of expenses and placement fees relating to the issuance and distribution of the securities.



## **Table of Contents**

### *Private Placements*

In July 2001, simultaneous with the closing of the follow-on public offering, we closed a private equity financing of 416,666 shares of common stock to GE Power Systems Equities, Inc., an indirect wholly owned subsidiary of General Electric Company, and 416,666 shares of common stock to Edison Development Corporation, an indirect wholly owned subsidiary of DTE Energy Company, raising an additional \$9.6 million in net proceeds.

In June 2006, the Company completed a private placement with Smart Hydrogen Inc. whereby the Company sold 395,000 shares of Class B Capital Stock, a class of preferred stock of the Company, which were convertible into 39,500,000 shares of common stock of the Company, and 11,240 shares of common stock of the Company to Smart Hydrogen for an aggregate net purchase price of approximately \$214.4 million. The purchase price per share of the shares sold to Smart Hydrogen, on an as-converted into common stock basis, was \$5.50. The Buyer also contemporaneously purchased 1,825,000 shares of common stock of the Company from DTE Energy Foundation. Following the closing of these transactions, the Buyer owned approximately 35% of the Company's outstanding common stock on an if-converted basis.

In December 2008, Smart Hydrogen Inc. sold to OJSC (Third Generation Company of the Wholesale Electricity Market) (OGK-3) all 395,000 shares of the Company's Class B Capital Stock as well as 5,126,939 shares of the Company's common stock (representing an approximately 35% ownership stake in aggregate). This sale triggered the automatic conversion of the Company's Class B Capital Stock into 39,500,000 shares of common stock, and the termination of all the rights and obligations attached to the Class B Capital Stock. The rights and obligations attached to the Class B Capital Stock that terminated include, but are not limited to, the right to appoint directors, veto rights and voting support obligations under the Investor Rights Agreement dated as of June 29, 2006, as amended (the Investor Rights Agreement). OGK-3 has executed a joinder agreement to the Investor Rights Agreement and is prohibited from transferring its shares of the Company's Common Stock to a competitor of the Company. OGK-3 is also bound by the same standstill provisions that applied to Smart Hydrogen, as set forth in the Investor Rights Agreement. This transfer and conversion triggered a change of control pursuant to Section 17 of our 1999 Stock Option and Incentive Plan; and, therefore, each outstanding Stock Option Right automatically became fully exercisable and conditions and restrictions on each outstanding Restricted Stock Award, Deferred Stock Award and Performance Share Award that relate solely to the passage of time and continued employment were removed.

### *Initial Capital Contributions*

We were formed in June 1997 as a joint venture between Mechanical Technology Incorporated and Edison Development Corporation, an indirect wholly owned subsidiary of DTE Energy Company. At formation, Mechanical Technology Incorporated contributed assets related to its fuel cell program, including intellectual property, 22 employees, equipment and the right to receive government contracts for research and development of PEM fuel cell systems, if awarded. Edison Development Corporation contributed or committed to contribute \$9.0 million in cash, expertise in distributed power generation and marketplace presence to distribute and sell stationary fuel cell systems.



**Table of Contents**

In aggregate, Mechanical Technology Incorporated has made cash contributions of \$27.0 million plus non-cash contributions of \$14.2 million, while Edison Development Corporation has made aggregate cash contributions of \$46.2 million, including \$5.0 million in connection with the closing of a private placement of our common stock in July, 2001. Mechanical Technology Incorporated and Edison Development Corporation have not made any additional cash or non-cash contributions since October 1999 and July 2001, respectively.

*Grant Agreements*

Since our inception we have been awarded, or participated in, federal and state government contracts related to research, development, test and demonstration of our PEM fuel cell technology. These contracts are primarily cost reimbursement contracts associated with the development of our PEM fuel cell technology. We have recognized research and development contract revenue of approximately \$96.2 million related to federal and state government contracts, and commercial contracts. We generally share in the cost of these programs, with cost-sharing percentages generally ranging from 20% and 50% of total project costs. We expect to continue certain research and development contract work that is directly related to our current product development efforts.

*Contractual Obligations*

Contractual obligations as of December 31, 2009, under agreements with non-cancelable terms are as follows:

	<b>Total</b>	<b>&lt;1 Year</b>	<b>1-3 Years</b>	<b>3-5 Years</b>	<b>&lt;5 Years</b>
Long-term debt obligations	\$ 1,564,116	\$ 413,708	\$ 679,904	\$ 470,504	\$ -
Operating lease obligations	4,262,855	1,248,557	1,266,798	559,200	1,188,300
Purchase obligations	819,420	809,420	10,000	-	-
Other obligations (A), (B), (C)	484,297	484,297	-	-	-
<b>Total</b>	<b>\$ 7,130,688</b>	<b>\$ 2,955,982</b>	<b>\$ 1,956,702</b>	<b>\$ 1,029,704</b>	<b>\$ 1,188,300</b>

(A) The Company has a contractual obligation to NYSERDA, a New York State Government agency, to pay royalties to NYSERDA based on 0.5% of net sales of our GenCore and GenSys products if product is manufactured in the state of New York. See Note 18 (Commitments and Contingencies) of the Consolidated Financial Statements for more detail.

(B) The Company has a contractual obligation to the National Research Council of Canada (NRC), a Canadian Government agency, through an Industrial Research Assistance Program (IRAP) agreement, to pay royalties to NRC based on 3.5% of gross revenues. See Note 10 (Repayable Government Assistance) of the Consolidated Financial Statements for more detail.



## **Table of Contents**

(C) The Company has a contractual obligation with General Electric Company (GE) acting through its Global Research unit pursuant to a development collaboration agreement as amended. The Company and GE mutually agreed to extend the terms of the development collaboration agreement such that the Company is obligated to purchase \$1 million of services from GE in connection with this collaboration prior to December 31, 2009. As of December 31, 2009, the approximately \$363,000 obligation remaining under the extended development collaboration agreement became due and payable; however, the Company and GE d/b/a GE Global Research entered into a Lease Agreement dated October 6, 2009 for space in the Company's Latham, New York facility whereby the parties mutually agreed that pursuant to section 4 of the Lease Agreement the amount owed by the Company to GE under the development collaboration agreement would be offset by the rent owed by GE to the Company each month. The development collaboration agreement is scheduled to terminate on the earlier of (i) December 31, 2014 or (ii) upon the completion of a certain level of program activity. See Note 18 (Commitments and Contingencies) of the Consolidated Financial Statements for more detail.

### **Item 7A. Quantitative and Qualitative Disclosures about Market Risk**

We invest our excess cash in government, government backed and interest-bearing investment-grade securities that we generally hold for the duration of the term of the respective instrument. We do not utilize derivative financial instruments, derivative commodity instruments or other market risk sensitive instruments, positions or transactions in any material fashion. Accordingly, other than with respect to auction rate debt securities, we believe that, while the investment-grade securities we hold are subject to changes in the financial standing of the issuer of such securities, we are not subject to any material risks arising from changes in interest rates, foreign currency exchange rates, commodity prices, equity prices or other market changes that affect market risk sensitive instruments.

A portion of the Company's total financial performance was attributable to our operations in Canada. Our exposure to changes in foreign currency rates primarily arises from short-term inter-company transactions with our Canadian subsidiaries and from client receivables in different currencies. Foreign sales are mostly made by our Canadian subsidiaries in their respective countries and are typically denominated in Canadian dollars. Our foreign subsidiaries incur most of their expenses in their local currency as well, which helps minimize our risk of exchange rate fluctuations. Accordingly, the Company's financial results are affected by risks such as currency fluctuations, particularly between the U.S. dollar and the Canadian dollar. As exchange rates vary, the Company's results can be materially affected.

In addition, the Company may source inventory among its worldwide operations. This practice can give rise to foreign exchange risk resulting from the varying cost of inventory to the receiving location as well as from the revaluation of intercompany balances. The Company mitigates this risk through local sourcing efforts.

### **Item 8. Financial Statements and Supplementary Data**

The Company's consolidated financial statements included in this report beginning at page F-1 are incorporated in this Item 8 by reference.





**Table of Contents**

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**  
None.

**Item 9A. Controls and Procedures**

*(a) Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures.*

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). Based on this evaluation, our principal executive officer and our principal financial officer concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures were effective, in that they provide reasonable assurance that information required to be disclosed by us in the reports we file or submit, under the Exchange Act, is recorded, processed, summarized and reported within the time period specified in the Securities and Exchange Commission's rules and forms.

*(b) Management's Report on Internal Control Over Financial Reporting*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control - Integrated Framework*, our management concluded that the Company maintained effective internal control over financial reporting as of December 31, 2009.

*(c) Attestation Report of the Registered Public Accounting Firm*

The attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting is included on page F-3 of this Annual Report on Form 10-K and incorporated herein by reference.

*(d) Changes in Internal Control Over Financial Reporting*

There were no changes in the Company's internal control over financial reporting identified in connection with the evaluation of such internal control that occurred during the Company's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

**Item 9B. Other Information**

Not applicable.

## **Table of Contents**

### **PART III**

#### **Item 10. Directors, Executive Officers and Corporate Governance**

##### *(a) Directors*

Incorporated herein by reference is the information appearing under the captions *Information about our Directors* and *Compliance with Section 16(a) of the Securities Exchange Act of 1934* in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Security and Exchange Commission.

##### *(b) Executive Officers*

Incorporated herein by reference is the information appearing under the captions *Executive Officers* and *Compliance with Section 16(a) of the Securities Exchange Act of 1934* in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Security and Exchange Commission.

##### *(c) Code of Business Conduct and Ethics*

We have adopted a Code of Business Conduct and Ethics that applies to all officers, directors, employees and consultants of the Company. The Code of Business Conduct and Ethics is intended to comply with Item 406 of Regulation S-K of the Securities Exchange Act of 1934 and with applicable rules of The NASDAQ Stock Market, Inc. Our Code of Business Conduct and Ethics is posted on our Internet website under the *Investor* page. Our Internet website address is [www.plugpower.com](http://www.plugpower.com). To the extent required or permitted by the rules of the SEC and NASDAQ, we will disclose amendments and waivers relating to our Code of Business Conduct and Ethics in the same place as our website.

##### *(d) Audit Committee*

Incorporated herein by reference is the information appearing under the caption *Audit Committee* in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

#### **Item 11. Executive Compensation**

Incorporated herein by reference is the information appearing under the caption *Executive Compensation* in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Security and Exchange Commission.



**Table of Contents****Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

Incorporated herein by reference is the information appearing under the caption "Principal Stockholders" in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

*Securities Authorized for Issuance Under Equity Compensation Plans*

The following table gives information about the shares of Common Stock that may be issued upon the exercise of options, restricted stock and warrants under the Plug Power, L.L.C. Second Amendment and Restatement of the Membership Option Plan (1997 Plan), the Company's 1999 Stock Option and Incentive Plan, as amended (1999 Stock Option Plan) and the Company's 1999 Employee Stock Purchase Plan, as of December 31, 2009.

Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants and rights (a)	exercise price of equity compensation plans (excluding shares reflected in column (a))(b)	Number of shares remaining available for future issuance under equity compensation plans (excluding shares reflected in column (a))(c)	
			Number of shares	Weighted average exercise price of equity compensation plans (excluding shares reflected in column (a))(c)
Equity compensation plans approved by security holders	14,663,952	(1) \$ 2.84	2,529,777	(2)
Equity compensation plans not approved by security holders	-	-	-	
<b>Total</b>	<b>14,663,952</b>	<b>\$ 2.84</b>	<b>2,529,777</b>	

- (1) Represents 5,981,286 outstanding options and 8,682,666 shares of unvested restricted stock issued under the 1997 Plan and 1999 Stock Option Plan.
- (2) Includes 2,440,451 shares available for future issuance under the 1999 Stock Option Plan and 89,326 shares available for future issuance under the 1999 Employee Stock Purchase Plan. The 1999 Stock Option Plan incorporates an evergreen formula pursuant to which the aggregate number of shares reserved for issuance under the 1999 Stock Option Plan will increase on the first day of January and July each year. On each

January 1 and July 1, the aggregate number of shares reserved for issuance under the 1999 Stock Option Plan increases by 16.4% of any net increase in the total number of outstanding shares since the preceding July 1 or January 1, as the case may be. In accordance with this formula, on January 1, 2010, the maximum number of shares remaining available for future issuance under the 1999 Stock Option Plan is 2,511,733.

**Item 13. Certain Relationships and Related Transactions and Director Independence**

Incorporated herein by reference is the information appearing under the caption Certain Relationships and Related Transactions in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

**Table of Contents**

**Item 14. Principal Accounting Fees and Services**

Incorporated herein by reference is the information appearing under the caption "Independent Auditors Fees" in the Company's definitive Proxy Statement for its 2010 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

**PART IV**

**Item 15. Exhibits and Financial Statement Schedules**

***15(a)(1) Financial Statements***

The financial statements and notes are listed in the Index to Consolidated Financial Statements on page F-1 of this Report.

***15(a)(2) Financial Statement Schedules***

Consolidated financial statement schedules not filed herein have been omitted as they are not applicable or the required information or equivalent information has been included in the consolidated financial statements or the notes thereto.

***15(a)(3) Exhibits***

Exhibits are as set forth in the "List of Exhibits" which immediately precedes the Index to Consolidated Financial Statements on page F-1 of this Report.





**Table of Contents**

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

P LUG P OWER INC.

By: **/s/ ANDREW MARSH  
Andrew Marsh,  
Chief Executive Officer**

Date: March 16, 2010

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
<b>/s/ ANDREW MARSH Andrew Marsh</b>	Chief Executive Officer and Director (Principal Executive Officer)	March 16, 2010
<b>/s/ GERALD A. ANDERSON Gerald A. Anderson</b>	Chief Financial Officer	March 16, 2010
<b>/s/ JEFFREY M. DRAZAN Jeffrey M. Drazan</b>	Director	March 16, 2010
<b>/s/ LARRY G. GARBERDING Larry G. Garberding</b>	Director	March 16, 2010
<b>/s/ MAUREEN O. HELMER Maureen O. Helmer</b>	Director	March 16, 2010
<b>/s/ GEORGE C. McNAMEE George C. McNamee</b>	Director	March 16, 2010
<b>/s/ GARY K. WILLIS Gary K. Willis</b>	Director	March 16, 2010

**Gary K. Willis**

48

---

## **Table of Contents**

Certain exhibits indicated below are incorporated by reference to documents of Plug Power on file with the Commission. Exhibits nos. 10.1, 10.2, 10.3, 10.5, 10.7 and 10.12 through 10.26 represent the management contracts and compensation plans and arrangements required to be filed as exhibits to this Annual Report on Form 10-K.

### **Exhibit No. and Description**

3.1	Amended and Restated Certificate of Incorporation of Plug Power Inc.(9)
3.2	Third Amended and Restated By-laws of Plug Power Inc.(10)
3.3	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Plug Power Inc.(9)
3.4	Certificate of Designations, Preferences and Rights of a Series of Preferred Stock of Plug Power Inc. classifying and designating the Series A Junior Participating Cumulative Preferred Stock.(11)
4.1	Specimen certificate for shares of common stock, \$.01 par value, of Plug Power.(2)
4.2	Shareholder Rights Agreement, dated as of June 23, 2009, between Plug Power Inc. and Registrar and American Stock Transfer & Trust Company, LLC, as Rights Agent.(11)
10.1	Second Amendment and Restatement of the Membership Option Plan dated February 15, 1999 and First Amendment to Second Amendment and Restatement of the Membership Option Plan dated October 1, 1999.(3)
10.2	1999 Stock Option and Incentive Plan.(2)
10.3	Employee Stock Purchase Plan.(2)
10.4	Registration Rights Agreement to be entered into by the Registrant and the stockholders of the Registrant.(9)
10.5	Severance Agreement, dated as of July 12, 2007, by and between Plug Power Inc. and Gerald A. Anderson.(6)
10.6	Joint Development Agreement, dated as of June 2, 2000, between Plug Power Inc. and Engelhard Corporation.(9)
10.7	Executive Severance Agreement, dated as of July 9, 2007, by and between Plug Power Inc. and Gerald A. Anderson.(6)
10.8	Indemnification Agreement, dated as of July 9, 2007, by and between Plug Power Inc. and Gerald A. Anderson.(6)



**Table of Contents**

**Exhibit No.  
and Description**

10.9	Investor Rights Agreement, dated as of June 29, 2006, by and among Plug Power Inc., Smart Hydrogen Inc. and the other parties named therein.(1)
10.10	Registration Rights Agreement, dated as of June 29, 2006, by and between Plug Power Inc. and Smart Hydrogen Inc.(1)
10.11	Form of Indemnification Agreement entered into with each director.(1)
10.12	Form of Incentive Stock Option Agreement.(4)
10.13	Form of Non-Qualified Stock Option Agreement for Employees.(4)
10.14	Form of Non-Qualified Stock Option Agreement for Independent Directors.(4)
10.15	Form of Restricted Stock Award Agreement.(4)
10.16	Amendment to the 1999 Stock Option and Incentive Plan.(13)
10.17	Amendment to the 1999 Stock Option and Incentive Plan.(13)
10.18	Amendment to the 1999 Stock Option and Incentive Plan.(4)
10.19	Plug Power Executive Incentive Plan.(5)
10.20	Employment Agreement, dated as of April 7, 2008, by and between Andrew Marsh and Plug Power Inc.(7)
10.21	Form of Non-Qualified Stock Option Agreement for Employees.(7)
10.22	Executive Employment Agreement, dated as of May 5, 2008, by and between Gerard L. Conway, Jr. and Plug Power Inc.(8)
10.23	Executive Employment Agreement, dated as of May 5, 2008, by and between Mark A. Sperry and Plug Power Inc.(8)
10.24	Executive Employment Agreement, dated as of October 28, 2009, by and between Erik J. Hansen and Plug Power Inc.(12)
10.25	Executive Employment Agreement, dated as of February 9, 2010, by and between Adrian Corless and Plug Power Inc.(12)

10.26  
50

Form of Restricted Stock Unit Award Agreement for Employees.(13)

---

**Table of Contents**

**Exhibit No.  
and Description**

23.1	Consent of KPMG LLP.(13)
31.1 and 31.2	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(13)
32.1 and 32.2	Certifications pursuant to 18 U.S.C. Section 1350, adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(13)

- (1) Incorporated by reference to the Company s current Report on Form 8-K dated June 29, 2006.
- (2) Incorporated by reference to the Company s Registration Statement on Form S-1 (File Number 333-86089).
- (3) Incorporated by reference to the Company s Registration Statement on Form S-1/A (File Number 333-86089).
- (4) Incorporated by reference to the Company s Form 10-Q for the period ended June 30, 2006.
- (5) Incorporated by reference to the Company s current Report on Form 8-K dated February 15, 2007.
- (6) Incorporated by reference to the Company s current Report on Form 8-K dated July 9, 2007.
- (7) Incorporated by reference to the Company s current Report on Form 8-K dated April 2, 2008.
- (8) Incorporated by reference to the Company s Form 10-Q for the period ended June 30, 2008.
- (9) Incorporated by reference to the Company s Form 10-K for the period ended December 31, 2008.
- (10) Incorporated by reference to the Company s current Report on Form 8-K dated October 28, 2009.
- (11) Incorporated by reference to the Company s Registration Statement on Form 8-A dated June 24, 2009.
- (12) Incorporated by reference to the Company s current Report on Form 8-K dated October 28, 2009.
- (13) Filed herewith.





**Table of Contents**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

	<b>Page</b>
<u>Reports of Independent Registered Public Accounting Firm</u>	F-1
<u>Consolidated balance sheets as of December 31, 2009 and 2008</u>	F-3
<u>Consolidated statements of operations for the years ended December 31, 2009, 2008 and 2007 and cumulative amounts from inception</u>	F-4
<u>Consolidated statements of cash flows for the years ended December 31, 2009, 2008 and 2007 and cumulative amounts from inception</u>	F-5
<u>Consolidated statements of stockholders' equity and comprehensive loss for the years ended December 31, 2009, 2008 and 2007</u>	F-6
<u>Notes to consolidated financial statements</u>	F-7



**Table of Contents**

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders

Plug Power Inc.:

We have audited the accompanying consolidated balance sheets of Plug Power Inc. and subsidiaries (a development stage enterprise) (the Company) as of December 31, 2009 and 2008, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2009, and the information included in the cumulative from inception presentations for the period January 1, 2001 to December 31, 2009 (not separately presented herein). These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Plug Power Inc. and subsidiaries (a development stage enterprise) as of December 31, 2009 and 2008, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2009, and the information included in the cumulative from inception presentations for the period January 1, 2001 to December 31, 2009 (not separately presented herein), in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 16, 2010, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Albany, New York

March 16, 2010

F-1

---

Table of Contents

## Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Plug Power Inc.:

We have audited internal control over financial reporting of Plug Power Inc. and subsidiaries (a development stage enterprise) as of December 31, 2009, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Plug Power Inc. and subsidiaries (a development stage enterprise) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria established in *Internal Control - Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Plug Power Inc. and subsidiaries as of December 31, 2009 and 2008, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2009, and the information included in the cumulative from inception presentations for the period January 1, 2001 to December 31, 2009 (not separately presented herein), and our report dated March 16, 2010 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Albany, New York

March 16, 2010

F-2

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**  
**(A DEVELOPMENT STAGE ENTERPRISE)**  
**CONSOLIDATED BALANCE SHEETS**

	December 31, 2009	December 31, 2008
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 14,580,983	\$ 80,844,500
Trading securities - auction rate debt securities	53,397,179	52,650,654
Available-for-sale securities	47,959,920	23,843,950
Accounts receivable, less allowance of \$92,560 in 2009 and \$75,148 in 2008	2,004,670	2,151,121
Inventory	6,360,755	6,264,372
Auction rate debt securities repurchase agreement	5,977,822	-
Prepaid expenses and other current assets	3,217,446	2,350,738
<b>Total current assets</b>	<b>133,498,775</b>	<b>168,105,335</b>
Restricted cash	2,265,405	-
Property, plant and equipment, net	14,342,740	17,769,974
Investment in leased property	2,255,772	-
Auction rate debt securities repurchase agreement	-	10,224,346
Intangible assets, net	11,821,830	12,843,182
Other assets	-	169,130
<b>Total assets</b>	<b>\$ 164,184,522</b>	<b>\$ 209,111,967</b>
<b>Liabilities and Stockholders Equity</b>		
Current liabilities:		
Accounts payable	\$ 2,877,270	\$ 3,274,972
Accrued expenses	5,847,541	9,945,316
Borrowings under line of credit	59,375,000	62,875,000
Current portion long term debt	413,708	-
Deferred revenue	4,596,717	5,425,270
Other current liabilities	379,584	413,837
<b>Total current liabilities</b>	<b>73,489,820</b>	<b>81,934,395</b>
Repayable government assistance	-	173,138
Long term debt	1,150,408	-
Other liabilities	1,275,541	1,140,312
<b>Total liabilities</b>	<b>75,915,769</b>	<b>83,247,845</b>
Stockholders equity:		
Common stock, \$0.01 par value per share; 245,000,000 shares authorized;		
Issued (including shares in treasury):		
130,591,236 at December 31, 2009 and 128,164,003 at December 31, 2008	1,305,913	1,281,640
Additional paid-in capital	767,808,572	765,347,706
Accumulated other comprehensive income (loss)	803,209	(359,253)
Deficit accumulated during the development stage	(680,370,937)	(639,662,385)
Less common stock in treasury:		
986,199 shares at December 31, 2009 and 402,114 shares at December 31, 2008	(1,278,004)	(743,586)

Edgar Filing: PLUG POWER INC - Form 10-K

Total stockholders' equity		88,268,753	125,864,122
Total liabilities and stockholders' equity	\$	164,184,522	\$ 209,111,967

The accompanying notes are an integral part of the consolidated financial statements.

F-3

---



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****CONSOLIDATED STATEMENTS OF OPERATIONS****For the years ended December 31, 2009, 2008 and 2007 and Cumulative Amounts from Inception**

	December 31, 2009	December 31, 2008	December 31, 2007	Cumulative Amounts from Inception
Product and service revenue	\$ 4,832,773	\$ 4,667,295	\$ 3,081,956	\$ 44,941,949
Research and development contract revenue	7,459,783	13,234,022	13,188,667	96,161,038
Total revenue	12,292,556	17,901,317	16,270,623	141,102,987
Cost of product and service revenue	7,246,453	11,442,232	9,398,774	62,217,896
Cost of research and development contract revenue	12,433,361	21,504,926	19,044,847	141,772,772
In-process research and development	-	-	-	12,026,640
Research and development expense	16,324,373	34,987,207	39,218,349	421,807,632
Selling, general and administrative expenses	15,426,806	28,333,151	19,323,158	143,857,997
Goodwill Impairment	-	45,842,656	-	45,842,656
Amortization of intangible assets	2,132,333	2,224,954	1,614,103	21,095,891
Operating loss	(41,270,770)	(126,433,809)	(72,328,608)	(707,518,497)
Interest and other income and net realized gains (losses) from available-for-sale securities	1,689,299	5,134,442	12,337,792	49,181,183
Change in fair value of auction rate securities repurchase agreement	(4,246,524)	10,224,346	-	5,977,822
Net trading gain	4,246,524	-	-	4,246,524
Impairment loss on available-for-sale securities	-	(10,224,346)	-	(10,224,346)
Interest and other expense	(1,127,081)	(400,657)	(580,000)	(3,455,873)
Loss before equity in losses of affiliates	(40,708,552)	(121,700,024)	(60,570,816)	(661,793,187)
Equity in losses of affiliates	-	-	-	(18,577,750)
Net loss	\$ (40,708,552)	\$ (121,700,024)	\$ (60,570,816)	\$ (680,370,937)
Loss per share:				
Basic and diluted	\$ (0.32)	\$ (1.36)	\$ (0.69)	
Weighted average number of common shares outstanding	129,110,661	89,383,480	87,341,717	

The accompanying notes are an integral part of the consolidated financial statements.



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****CONSOLIDATED STATEMENTS OF CASH FLOWS****For the years ended December 31, 2009, 2008 and 2007 and cumulative amounts from inception**

	Twelve months ended December 31,			Cumulative Amounts
	2009	2008	2007	from Inception
<b>Cash Flows From Operating Activities:</b>				
Net loss	\$ (40,708,552)	\$ (121,700,024)	\$ (60,570,816)	\$ (680,370,937)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	3,634,668	4,398,147	3,847,024	42,063,390
Equity in losses of affiliates	-	-	-	18,577,750
Amortization of intangible assets	2,132,333	2,224,954	1,614,103	21,095,891
Noncash prepaid development costs	-	-	-	10,000,000
Loss (gain) on disposal of property, plant and equipment	504,397	(2,701)	12,421	541,610
In-kind services	-	-	-	1,340,000
Stock-based compensation	1,928,501	8,590,573	5,422,745	45,236,932
Provision for bad debts	92,560	75,148	57,000	260,378
Amortization of deferred grant revenue	-	-	-	(1,000,000)
Amortization and write-off of deferred rent	-	-	-	2,000,000
Goodwill impairment charge	-	45,842,656	-	45,842,656
Impairment loss on available-for-sale securities	-	10,224,346	-	10,224,346
Net unrealized gains on trading securities	(4,246,524)	-	-	(4,246,524)
Change in fair value of auction rate debt securities repurchase agreement	4,246,524	(10,224,346)	-	(5,977,822)
Gain on repayable government assistance	(324,300)	(1,232,522)	-	(1,556,822)
In-process research and development	-	-	-	7,042,640
Changes in assets and liabilities, net of effects of acquisitions:				
Accounts receivable	65,440	2,281,723	(2,738,263)	(1,100,070)
Inventory	(95,935)	(521,253)	655,753	(5,165,572)
Prepaid expenses and other current assets	(684,277)	256,448	1,223,756	(3,988,641)
Accounts payable and accrued expenses	(3,944,407)	1,103,013	518,297	1,094,613
Deferred revenue	(828,675)	2,087,370	647,218	5,598,233
Net cash used in operating activities	(38,228,247)	(56,596,468)	(49,310,762)	(492,487,949)
<b>Cash Flows From Investing Activities:</b>				
Cash paid for acquisitions, net	-	-	(47,732,866)	(19,267,125)
Purchase of property, plant and equipment	(532,960)	(1,418,641)	(2,944,405)	(38,875,181)
Investment in leased property	(2,461,526)	-	-	(2,461,526)
Restricted cash	(2,265,405)	-	-	(2,265,405)
Proceeds from disposal of property, plant and equipment	223,000	14,587	13,963	567,216
Purchase of intangible asset	-	-	-	(9,624,500)
Investment in affiliate	-	-	-	(1,500,000)
Proceeds from trading securities	3,500,000	-	-	3,500,000
Proceeds from maturities and sales of available-for-sale securities	137,555,930	266,774,180	556,640,568	2,733,755,388

Edgar Filing: PLUG POWER INC - Form 10-K

Purchases of available-for-sale securities	(161,803,208)	(199,713,772)	(472,899,139)	(2,844,494,512)
Net cash (used in) provided by investing activities	(25,784,169)	65,656,354	33,078,121	(180,665,645)
<b>Cash Flows From Financing Activities:</b>				
Proceeds from issuance of common and preferred stock	-	-	-	428,529,602
Proceeds from initial public offering, net	-	-	-	201,911,705
Stock issuance costs	-	-	-	(5,548,027)
Purchase of treasury stock	(534,418)	(618,642)	-	(1,153,060)
Proceeds from stock option exercises and employee stock purchase plan	76,493	202,875	480,654	11,521,718
Repayment of loans due to General Hydrogen Shareholders	-	-	(400,000)	(400,000)
(Repayment) proceeds from borrowings under line of credit	(3,500,000)	62,875,000	-	59,375,000
Proceeds from long term debt	1,793,461	-	-	1,793,461
Principal payments on long-term debt	(229,602)	-	-	(7,016,289)
Repayment of government assistance	-	(2,235,244)	-	(2,235,244)
Net cash (used in) provided by financing activities	(2,394,066)	60,223,989	80,654	686,778,866
Effect of exchange rate changes on cash	142,965	(516,313)	1,329,059	955,711
Increase (decrease) in cash and cash equivalents	(66,263,517)	68,767,562	(14,822,928)	14,580,983
<b>Cash and cash equivalents, beginning of period</b>	80,844,500	12,076,938	26,899,866	
<b>Cash and cash equivalents, end of period</b>	\$ 14,580,983	\$ 80,844,500	\$ 12,076,938	\$ 14,580,983

The accompanying notes are an integral part of the consolidated financial statements.

F-5

Table of Contents

## PLUG POWER INC. AND SUBSIDIARIES

## (A DEVELOPMENT STAGE ENTERPRISE)

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE LOSS

For the years ended December 31, 2009, 2008 and 2007

	Preferred Stock		Common Stock			Additional Paid-in- Capital	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage	Treasury Stock	
	Shares	Amount	Shares	Amount	Shares				Amount	
<b>December 31, 2006</b>	395,000	\$ 3,950	86,794,915	\$ 867,952	\$751,118,315	\$ (70,480)	\$(457,391,545)	-	\$ -	
Net loss	-	-	-	-	-	-	(60,570,816)	-	-	
Foreign currency translation gain	-	-	-	-	-	7,739,141	-	-	-	
Unrealized gain on available-for-sale securities, net of reclassification adjustments for realized net losses and gains	-	-	-	-	-	141,897	-	-	-	
Total comprehensive loss										
Stock based compensation	-	-	871,255	8,710	5,290,590	-	-	-	-	
Stock option exercises	-	-	151,237	1,512	149,725	-	-	-	-	
Stock issued under employee stock purchase plan	-	-	65,515	655	205,153	-	-	-	-	
Warrants	-	-	-	-	1,405,715	-	-	-	-	
<b>December 31, 2007</b>	395,000	\$ 3,950	87,882,922	\$878,829	\$758,169,498	\$ 7,810,558	\$(517,962,361)	-	\$ -	
Net loss	-	-	-	-	-	-	(121,700,024)	-	-	
Foreign currency translation loss	-	-	-	-	-	(8,325,499)	-	-	-	
Unrealized gain on available-for-sale securities, net of	-	-	-	-	-	155,688	-	-	-	

reclassification  
adjustments for  
realized net losses  
and gains

Total  
comprehensive  
loss

Stock based  
compensation

Conversion of  
Preferred Stock

Treasury stock

Stock option

exercises  
Stock issued  
under employee  
stock purchase  
plan

**December 31,  
2008**

Net loss

Foreign currency  
translation gain

Unrealized loss  
on

available-for-sale  
securities, net of

reclassification  
adjustments for  
realized net losses  
and gains

Total comprehensive loss

Stock based  
compensation

Treasury stock

Stock issued  
under employee  
stock purchase  
plan

**December 31,  
2009**

	-	-	665,744	6,658	7,258,897	-	-	-	-
	(395,000)	(3,950)	39,500,000	395,000	(391,050)	-	-	-	-
	-	-	-	-	-	-	-	402,114	(743)
	-	-	3,935	39	3,896	-	-	-	-
	-	-	111,402	1,114	306,465	-	-	-	-
	-	\$ -	128,164,003	\$1,281,640	\$765,347,706	\$ (359,253)	\$(639,662,385)	402,114	\$ (7)
	-	-	-	-	-	-	(40,708,552)	-	-
	-	-	-	-	-	1,293,770	-	-	-
	-	-	-	-	-	(131,308)	-	-	-
	-	-	2,218,993	22,190	2,264,858	-	-	-	-
	-	-	-	-	-	-	-	584,085	(534)
	-	-	208,240	2,083	196,008	-	-	-	-
	-	\$ -	130,591,236	\$1,305,913	\$767,808,572	\$ 803,209	\$(680,370,937)	986,199	(1,2)

The accompanying notes are an integral part of the consolidated financial statements.

F-6

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

#### **1. Nature of Operations**

##### *Description of Business*

Plug Power Inc. is a development stage enterprise involved in the design, development and manufacture of fuel cell systems for industrial off-road (forklift or material handling) markets and stationary power markets worldwide. The Company is a development stage enterprise because substantially all of the Company's resources and efforts are aimed at the discovery of new knowledge that could lead to significant improvement in fuel cell reliability and durability, and the establishment, expansion and stability of markets for the Company's products. The Company continues to experience significant net outflows of cash from operations and devotes significant efforts towards financial planning in order to forecast future cash spending and the ability to continue product research and development activities and expansion of markets for its products. Fuel cell technology within the Company's principal target markets, material handling power and remote prime power, and our secondary markets, residential and backup power, is still early in the technology adoption life cycle.

In 2010, as the Company plans to enter the commercial adoption phase of its GenDrive™ and GenSyr® products, with commensurate resource commitments to selling, marketing, and service activities, it is expected that we will no longer be a development stage enterprise.

The Company is focused on proton exchange membrane, or PEM, fuel cell and fuel processing technologies and fuel cell/battery hybrid technologies, 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 (LPG), natural gas, propane, methanol, ethanol, gasoline or biofuels. Hydrogen can also be obtained from the electrolysis of water. Hydrogen can be purchased directly from industrial gas providers or can be produced on-site at consumer locations.

The Company sells its products worldwide through our direct product sales force, original equipment manufacturers (OEMs) and their dealer networks. We sell to business, industrial and government customers.

The Company was organized in the State of Delaware on June 27, 1997 and became listed on the NASDAQ exchange on October 29, 1999. The Company was originally formed as a joint venture between Edison Development Corporation and Mechanical Technology Incorporated. In 2007, the Company merged with and acquired all the assets, liabilities and equity of Cellex Power Products, Inc. (Cellex) and General Hydrogen Corporation (General Hydrogen).

Unless the context indicates otherwise, the terms "Company," "Plug Power," "we," "our" or "us" as used herein refers to Plug Power Inc. (the registrant) and its subsidiaries.

Although the Company has a significant amount of available-for-sale securities, as described further below, as of December 31, 2009, neither the Company nor any of its subsidiaries was an investment company pursuant to the

Investment Company Act of 1940, as amended.

F-7

---



**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Liquidity***

Although the Company anticipates incurring substantial additional losses, we believe that our current cash, cash equivalents, trading securities and available-for-sale securities balances will provide sufficient liquidity to fund operations for at least the next twelve months including anticipated increased working capital needs. The Company's cash requirements depend on numerous factors, including completion of our product development activities, our ability to commercialize our energy products, market acceptance of our systems and other factors. The Company expects to devote substantial capital resources to continue its development programs directed at commercializing our energy products for worldwide use, building a sales base and expanding market channels, hiring and training production staff, developing and better utilizing our manufacturing capacity, production and research and development activities. The Company expects to pursue the expansion of its operations through internal growth and strategic acquisitions and expects that such activities will be funded from existing cash, cash equivalents, trading securities, available-for-sale securities, and the issuance of additional equity or debt securities or additional borrowings subject to market and other conditions. The failure to raise the funds necessary to finance future cash requirements or consummate future acquisitions could adversely affect the Company's ability to pursue its strategy and could negatively affect its operations in future periods.

Included in trading securities and working capital at December 31, 2009 and 2008, respectively, is \$53.4 million and \$52.7 million of auction rate debt securities. The auction rate debt securities are secured by student loans which are generally guaranteed by the Federal government. These auction rate debt securities are structured to be tendered at par, at the investor's option, at auctions occurring every 27-30 days. However, due to the liquidity issues in the credit and capital markets, the market for auction rate debt securities began experiencing auction failures in February 2008 and there have been no successful auctions for the securities held in our portfolio since the failures began. We continue to receive interest on these securities, subject to an interest rate cap formula for each security as periodically adjusted in accordance with the respective securities' agreement. At December 31, 2009, the interest rates ranged from 0.61% to 3.48% on the auction rate debt securities as compared to the interest rate range at December 31, 2008 from 1.55% to 3.43%.

The Company has pledged these securities as collateral to a third-party lender for a Credit Line Agreement (See Note 7, Credit Line Agreement and Auction Rate Debt Securities Repurchase Agreement) entered into in December 2008. Given the lack of liquidity in the market for auction rate debt securities, the fair value of these auction rate debt securities have become lower than their cost and, based on an analysis of other than temporary impairment factors, management has determined, beginning in the first quarter of 2008, that this difference represents a decline in value

that is other-than-temporary. Accordingly, the Company recorded an other-than-temporary impairment charge of \$10.2 million for the year ended December 31, 2008 in the consolidated statements of operations. In December 2008, the Company entered into a Repurchase Agreement with a third-party lender such that the Company may require the third-party lender to repurchase the auction rate debt securities pledged as collateral for the Credit Line Agreement, at their par value, from June 30, 2010 through July 2, 2012 as full settlement for the advances on the Credit Line Agreement. The Company has elected to record the Repurchase Agreement at its fair value in accordance with Accounting Standard Codification No. 825-10-25 to allow consistent treatment of the agreement and the underlying collateral. At December 31, 2009 and 2008, the fair value of this item is approximately \$6.0 million and \$10.2 million, respectively, and is recorded as an asset on the consolidated balance sheets. The change in the fair value of the Repurchase Agreement for the year ended December 31, 2009 was \$4.2 million and is recorded as a net unrealized loss on the consolidated statements of operations. The fair value change of the Repurchase Agreement of \$10.2 million was recorded as a gain in the 2008 consolidated statement of operations.

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Under Internal Revenue Code (IRC) Section 382, the use of loss carryforwards may be limited if a change in ownership of a company occurs. If it is determined that due to transactions involving the Company's shares owned by its 5 percent shareholders a change of ownership has occurred under the provisions of IRC Section 382, the Company's net operating loss carryforwards could be subject to significant IRC Section 382 limitations.

At December 31, 2009, the Company has approximately \$536.1 million in Federal and state net operating loss carryforwards and \$15 million in Federal research and experimentation tax credit carryforwards (of which \$5.7 million represents an uncertain tax position), which resulted in \$203.7 million and \$9.3 million, respectively, in deferred tax assets that are recorded on the Company's balance sheet at December 31, 2009. These deferred tax assets are fully reserved for through a valuation allowance. During the fourth quarter of 2009, as a result of certain equity transactions, the Company may have had an ownership change for IRC Section 382 purposes. If a change occurred in the fourth quarter, an IRC Section 382 limitation could result in as much as approximately \$458.6 million of the Company's Federal and state net operating loss carryforwards expiring prior to utilization, which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$174.3 million. Additionally, if a change in control occurred during the fourth quarter an IRC Section 382 limitation could result in as much as approximately \$15 million of Federal research and experimentation tax credit carryforwards expiring prior to utilization, which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$9.3 million. These decreases would have no impact on the Company's financial position, results of operations, or cash flows. However, these potential future tax benefits would no longer be available to the Company. The Company is in the process of completing a formal Section 382 study to determine if an ownership change has occurred.

As of December 31, 2009, we had cash and cash equivalents of \$14.6 million, available-for-sale securities of \$48.0 million and working capital of \$60.0 million.

#### ***Mergers and Acquisitions***

On April 3, 2007, we purchased all of the outstanding capital stock of Cellex, a development stage enterprise, from its equity holders for an aggregate cash purchase price of \$46.1 million, including acquisition costs.

On May 4, 2007, the Company completed the acquisition of all of the outstanding shares of General Hydrogen, a development stage enterprise, for an aggregate purchase price of \$12.4 million, including acquisition costs. The purchase price includes the settlement of \$3 million in senior secured loans previously made by Plug Power to General Hydrogen, as well as 571,429 warrants granted to shareholders of General Hydrogen that were valued at \$1.4 million. The warrant price was based on a Monte Carlo simulation which was performed, and the mean value was selected. The warrants become exercisable when Plug Power's Common Stock trades at a volume weighted average price of \$7.00 or more for 10 consecutive trading days. The warrants carry an exercise price of \$.01 per share and

expire four years from the date of issuance.

***Private Placements***

In June 2006, the Company completed a private placement with Smart Hydrogen Inc. (the Buyer) whereby the Company sold 395,000 shares of Class B Capital Stock, a class of preferred stock of the Company, which were convertible into 39,500,000 shares of common stock, and 11,240 shares of common stock to the Buyer for a net purchase price of approximately \$214.4 million, after payment of expenses relating to the issuance. The Buyer also contemporaneously purchased 1,825,000 shares of common stock of the Company from DTE Energy Foundation.

***Change in Control***

In December 2008, Smart Hydrogen Inc. sold to OJSC (Third Generation Company of the Wholesale Electricity Market) (OGK-3) all 395,000 shares of the Company's Class B Capital Stock as well as 5,126,939 shares of the Company's common stock. This sale triggered the automatic conversion of the Company's Class B Capital Stock into 39,500,000 shares of common stock, and the termination of all the rights and obligations attached to the Class B Capital Stock. The rights and obligations attached to the Class B Capital Stock that terminated included, but were not limited to, the right to appoint directors, veto rights and voting support obligations under the Investor Rights Agreement dated as of June 29, 2006, as amended (the Investor Rights Agreement). OGK-3 has executed a joinder agreement to the Investor Rights Agreement and is prohibited from transferring its shares of the Company's Common Stock to a competitor of the Company. OGK-3 is also bound by the same standstill provisions that applied to Smart Hydrogen, as set forth in the Investor Rights Agreement. This transfer and conversion triggered a change of control pursuant to Section 17 of our 1999 Stock Option and Incentive Plan; and, therefore, each outstanding Stock Option Right automatically became fully exercisable and conditions and restrictions on each outstanding Restricted Stock Award, Deferred Stock Award and Performance Share Award that relates solely to the passage of time and continued employment were removed.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**2. Summary of Significant Accounting Policies**

***Principles of Consolidation***

The consolidated financial statements include the financial statements of Plug Power Inc. and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation. It is the Company's policy to reclassify prior year consolidated financial statements to conform to current year presentation.

***Cash Equivalents***

Cash equivalents consist of money market accounts and overnight repurchase agreements with an initial term of less than three months. For purposes of the consolidated statements of cash flows, the Company considers all highly-liquid debt instruments with original maturities of three months or less to be cash equivalents.

***Investment Securities***

Investment securities at December 31, 2009 and 2008 consist of U.S. Treasury, corporate debt, auction rate debt securities, and government agency securities. The Company classifies its securities in one of two categories: trading or available for sale. Trading securities consist of auction rate debt securities. All other securities not included in trading are classified as available for sale.

Trading and available for sale securities are recorded at fair value. Unrealized holding gains and losses on trading securities are included in earnings. Unrealized holding gains and losses, net of the related tax effect, on available for sale securities are excluded from earnings and are reported as a separate component of accumulated other comprehensive income until realized. Realized gains and losses from the sale of available for sale securities are determined on a specific identification basis.

A decline in the fair value of any available for sale debt security below cost that is deemed to be other than temporary, and management does not intend to sell the security and believes it is more likely than not the company will not be required to sell the security prior to recovery of cost or amortized cost, the portion of the total impairment attributable to the credit loss is recognized in earnings, and the remaining difference between the security's amortized cost basis and its fair value is included in other comprehensive income.



## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

For impaired available for sale debt securities that management intends to sell, or where management believes it is more than likely than not that the Company will be required to sell, and does not expect the fair value of a security to recover to cost or amortized cost prior to the expected date of sale, an other than temporary impairment charge is recognized in earnings equal to the difference between the fair value and cost or amortized cost basis of the security. The fair value of the other than temporarily impaired security becomes the new cost basis.

To determine whether an impairment is other than temporary the Company considers the reasons for the impairment, the severity and duration of the impairment, changes in value subsequent to period-end, forecasted performance of the investee, and the general market conditions in the geographic area or industry the investee operates in.

Premiums and discounts are amortized or accreted over the life of the related available for sale security as an adjustment to yield using the interest method. Interest income is recognized when earned.

#### ***Accounts Receivable***

Accounts receivable related to product and service arrangements are recorded when products are shipped or delivered to customers, as appropriate. Accounts receivable related to contract research and development arrangements are recorded when work is completed under government contracts. Accounts receivable are stated at the amount billed to customers. Interest and late charges billed to customers are not material, and because collection is uncertain, are not recognized until collected. Accounts receivable are ordinarily due between 30 and 60 days after the issuance of the invoice. Accounts are considered delinquent when more than 90 days past due. Delinquent receivables are reserved or written off based on individual credit evaluation and specific circumstances of the customer. The allowance for doubtful accounts and related receivable are reduced when the amount is deemed uncollectible.

#### ***Inventory***

Inventory is stated at the lower of cost or market value and consists primarily of raw materials. In the case of our limited consignment arrangements, we do not relieve inventory until the customer has accepted the product, at which time the risks and rewards of ownership have transferred. At December 31, 2009 and 2008, inventory on consignment was valued at approximately \$0 and \$45,000, respectively.

#### ***Goodwill and Other Intangible Assets***

The Company accounts for goodwill pursuant to Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) No. 805, Business Combinations and FASB ASC No. 350, Intangibles—Goodwill and Other. Goodwill is tested for impairment annually or more frequently when events or circumstances indicate that the carrying value more likely than not exceeds its fair value. Goodwill impairment testing is performed at the segment (or reporting unit) level. The Company's goodwill is evaluated at the entity level as there is only one reporting unit. Goodwill is assigned to reporting units at the date the goodwill is initially recorded. Once goodwill has been assigned

to reporting units, it no longer retains association with a particular acquisition, and all of the activities within a reporting unit, whether acquired or organically grown, are available to support the value of the goodwill. The goodwill impairment analysis is a two-step test. The first step, used to identify potential impairment, involves comparing the reporting unit's fair value to its carrying value including goodwill. If the fair value of a reporting unit exceeds its carrying value, applicable goodwill is considered not to be impaired. If the carrying value exceeds fair value, there is an indication of impairment and the second step is performed to measure the amount of impairment, if any. The Company performs its annual goodwill assessment under FASB ASC No. 350 at the date of its fiscal year end. As of December 31, 2009, the Company has no goodwill. See Note 6, Goodwill and Other Intangible Assets for more information.



**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

FASB ASC No. 350 also requires that intangible assets with estimable useful lives be amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment when certain triggering events occur in accordance with FASB ASC No. 360-10-35-15, Impairment or Disposal of Long-Lived Assets. Intangible assets consisting of acquired technology and customer relationships related to Cellex and General Hydrogen are amortized using a straight-line method over their useful lives of 8 years. As a result of the uncertain economic environment in general and the further decline in our stock price, the Company performed an impairment assessment in accordance with FASB ASC No. 360-10-35-15 as of December 31, 2009 and has determined that no impairment exists.

***Product and Service Revenue***

The Company applies the guidance within FASB ASC No. 605-10-S99, Revenue Recognition Overall SEC Materials, in the evaluation of its contracts to determine when to properly recognize revenue. Under FASB ASC No. 605-10-S99 revenue is recognized when title and risk of loss have passed to the customer, there is persuasive evidence of an arrangement, delivery has occurred or services have been rendered, the sales price is determinable, and collectibility is reasonably assured.

The Company's initial sales of products are contract-specific arrangements containing multiple obligations that may include a combination of fuel cell systems, continued service, maintenance, a supply of hydrogen and other support. While contract terms generally stipulate that title and risk of ownership pass and require payment upon shipment or delivery of the fuel cell system, or acceptance in the case of certain consignment sales, and also stipulate that payment is not contingent on the achievement of specific milestones or other substantive performance, the multiple obligations within the Company's contractual arrangements are not accounted for separately based on the Company's limited commercial experience and lack of evidence of fair value of the separate elements. As a result, the Company defers recognition of product and service revenue and recognizes revenue on a straight-line basis over the stated contractual terms, as the continued service, maintenance and other support obligations expire, which are generally for periods of twelve (12) to thirty (30) months or which may extend over multiple years. Our customers have no special right of return, price protection allowances or other sales incentives. We do offer a discount from our manufacturer's suggested retail price to resellers to allow for mark-up of the reseller. In the case of the Company's limited consignment sales, the Company does not begin recognizing revenue on a deferred basis until the customer has accepted the product, at which time the risks and rewards of ownership have transferred, the price is fixed and the Company has a reasonable expectation of collection upon billing. The costs associated with the product, service and other obligations are generally expensed as they are incurred. At December 31, 2009 and 2008, the Company had unbilled amounts from product and service revenue in the amount of approximately \$33,000 and \$18,000, respectively. At December 31, 2009 and 2008, the Company had deferred product and service revenue in the amount of \$4.6 million and \$5.4

million, respectively.

F-12

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

As the Company gains experience, including field experience relative to service and warranty obligations based on the sales of initial products, the fair values for the multiple elements within future contracts may become determinable and the Company may, in future periods, recognize revenue upon shipment, delivery or installation of the product, or may continue to defer recognition, based on application of appropriate guidance within FASB ASC No. 605-25-25, Revenue Recognition Multiple-Element Arrangements - Recognition.

***Research and Development Contract Revenue***

Research and development contract revenue primarily relates to cost reimbursement research and development contracts associated with the development of PEM fuel cell technology. The Company generally shares in the cost of these programs with cost sharing percentages generally ranging from 20% to 50% of total project costs. Revenue from time and material contracts is recognized on the basis of hours expended plus other reimbursable contract costs incurred during the period. Revenue from fixed fee contracts is recognized on the basis of percentage of completion. Our percentage-of-completion contracts are best efforts contracts with essentially no set deliverables. We measure progress on our percentage-of-completion contracts based on costs incurred. All allowable work performed through the end of each calendar quarter is billed, subject to limitations in the respective contracts. We expect to continue certain research and development contract work that is directly related to our current product development efforts. At December 31, 2009 and 2008, the Company had unbilled amounts from research and development contract revenue in the amount of approximately \$1.3 million and \$1.5 million, respectively. At December 31, 2009 and 2008, the Company had customer deposits from research and development contract revenue, representing deposits in advance of performance of the allowable work, in the amount of approximately \$159,000 and \$13,000, respectively.

***Property, Plant and Equipment***

Property, plant and equipment are originally recorded at cost. Maintenance and repairs are expensed as costs are incurred. Depreciation on plant and equipment is calculated on the straight-line method over the estimated useful lives of the assets. The Company records depreciation and amortization over the following estimated useful lives:

Buildings	20 years
-----------	----------

Edgar Filing: PLUG POWER INC - Form 10-K

Building improvements	5 20 years
Software, machinery and equipment	1 15 years

F-13

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Impairment of Long-Lived Assets***

The Company evaluates the recoverability of long-lived assets in accordance with the provisions of FASB ASC No. 360-10-35-15, Impairment or Disposal of Long-Lived Assets. Long-lived assets, such as property, plant, and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and are no longer depreciated. The assets and liabilities of a disposal group classified as held for sale would be presented separately in the appropriate asset and liability sections of the balance sheet. As a result of the uncertain economic environment in general and the further decline in our stock price, the Company performed an impairment assessment in accordance with FASB ASC No. 360-10-35-15 as of December 31, 2009 and has determined that no impairment exists.

***Income Taxes***

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets if it is more likely than not that such assets will not be realized. We did not report a benefit for federal and state income taxes in the consolidated financial statements as the deferred tax asset generated from our net operating loss has been offset by a full valuation allowance because it is more likely than not that the tax benefits of the net operating loss carryforward will not be realized.

The Company accounts for uncertain tax positions in accordance with FASB ASC No. 740-10-25, Income Taxes Overall Recognition. The Company must recognize in its financial statements the impact of a tax position, if that position is more likely than not to be sustained on audit, based on the technical merits of the position.

***Foreign Currency Translation***

Foreign currency translation adjustments arise from conversion of the Company's foreign subsidiary's financial statements to US dollars for reporting purposes, and are included in accumulated other comprehensive income (loss) in stockholders' equity on the accompanying consolidated balance sheets. Realized foreign currency transaction gains and losses are included in interest and other expense in the accompanying consolidated statements of operations.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

***Research and Development***

Costs incurred in research and development by the Company are expensed as incurred.

***Stock-Based Compensation***

The Company maintains employee stock-based compensation plans, which are described more fully in Note 14, Employee Benefit Plans.

Stock-based compensation represents the cost related to stock-based awards granted to employees and directors. The Company measures stock-based compensation cost at grant date, based on the fair value of the award, and recognizes the cost as expense on a straight-line basis (net of estimated forfeitures) over the option's requisite service period.

The Company estimates the fair value of stock-based awards using a Black-Scholes valuation model. Stock-based compensation expense is recorded in Research and development expense and Selling, general and administrative expense in the consolidated statements of operations based on the employees' respective function.

The Company records deferred tax assets for awards that result in deductions on the Company's income tax returns, unless the Company cannot recognize the deduction (i.e. the Company is in a net operating loss (NOL) position), based on the amount of compensation cost recognized and the Company's statutory tax rate. Differences between the deferred tax assets recognized for financial reporting purposes and the actual tax deduction reported on the Company's income tax return are recorded in additional paid-in capital if the tax deduction exceeds the deferred tax asset or in the consolidated statements of operations if the deferred tax asset exceeds the tax deduction and no additional paid-in capital exists from previous awards. No tax benefit or expense for stock-based compensation has been recorded during the years ended December 31, 2009, 2008 and 2007 since the Company remains in a NOL position.

***Per Share Amounts***

The Company reports net loss per basic and diluted common share in accordance with the provisions of FASB ASC No. 260, Earnings Per Share (ASC 260), which establishes standards for computing and presenting loss per share. Basic earnings per common share are computed by dividing net loss available to common stockholders by the weighted average number of common shares outstanding during the reporting period, adjusted for unvested restricted stock. Diluted earnings per share reflects the potential dilution that could occur if securities or other contracts to issue common stock (such as convertible preferred stock, stock options, unvested restricted stock, and warrants) were exercised or converted into common stock or resulted in the issuance of common stock (net of any assumed repurchases) that then shared in the earnings of the Company, if any. This is computed by dividing net earnings by the combination of dilutive common share equivalents, which is comprised of shares issuable under outstanding warrants, the Company's share-based compensation plans, and the weighted average number of common shares outstanding during the reporting period. Since the Company is in a net loss position, all common stock equivalents would be considered to be anti-dilutive and are, therefore, not included in the determination of diluted earnings per share. Accordingly, basic and diluted loss per share are the same.



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table provides the components of the calculations of basic and diluted earnings per share:

	<b>Year Ended December 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Numerator:			
Net loss	\$ (40,708,552 )	\$ (121,700,024 )	\$ (60,570,816 )
Denominator:			
Weighted average number of common shares outstanding	129,110,661	89,383,480	87,341,717

These dilutive potential common shares are summarized as follows:

	<b>Year Ended December 31,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Stock options outstanding	5,981,286	6,119,804	6,578,313
Unvested restricted stock (2)	8,682,666		784,697
Preferred stock (1)			39,500,000
Warrants	571,429	571,429	571,429
Number of dilutive potential common shares	15,235,381	6,691,233	47,434,439

(1) The preferred stock amount represents the dilutive potential common shares of the 395,000 shares of Class B capital stock issued on June 29, 2006, which were converted into 39,500,000 shares of common stock in

December 2008.

- (2) December 31, 2009, does not include 2,028,572 shares subsequently issued in 2010 (which will immediately vest) for the achievement of performance objectives in 2009.

F-16

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

*Use of Estimates*

The consolidated financial statements of the Company have been prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

*Subsequent Events*

The Company has evaluated subsequent events and transactions for potential recognition or disclosure in the financial statements through March 16, 2010, which was the date we filed this Form 10-K with the SEC. No recognized or non-recognized subsequent events were noted.

*Recently Adopted Accounting Pronouncements*

The Company adopted the Financial Accounting Standards Board (FASB) Accounting Standard Codification (ASC) No. 105, Generally Accepted Accounting Principles (GAAP) (ASC No. 105 or FASB Codification) during the quarter ended September 30, 2009 and it did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity. The Company has appropriately updated its disclosures with the appropriate FASB Codification references. As such, all the notes to the consolidated financial statements below as well as the critical accounting policies in the Management's Discussion and Analysis section have been updated with the appropriate FASB Codification references. The FASB Codification is the authoritative source of generally accepted accounting principles in the United States. Rules and interpretive releases of the SEC under federal securities laws are also sources of authoritative GAAP for SEC registrants. The FASB will no longer issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts; instead the FASB will issue Accounting Standards Updates (ASU). ASU will not be authoritative in their own right as they will only serve to update the FASB Codification. The issuance of the FASB Codification was not intended to change or alter existing GAAP.

The Company adopted ASC No. 810-10, Consolidation-Overall on January 1, 2009. This standard establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent's ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. The standard also establishes reporting requirements that provide sufficient disclosures that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. The Company does not have any outstanding noncontrolling interests. The Company also adopted ASU No. 2010-02, Accounting and Reporting for Decreases in Ownership of a Subsidiary - A Scope Clarification. This Update was issued to clarify the recent guidance on accounting for decreases in ownership of a subsidiary. This Update is effective as of December 31, 2009. The adoption of these standards did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company adopted ASC No. 805, Business Combinations on January 1, 2009. This standard applies to all transactions or other events in which an entity obtains control of one or more businesses, including those sometimes referred to as true mergers or mergers of equals and combinations achieved without the transfer of consideration. This standard applies to all business entities, including mutual entities that previously used the pooling-of-interests method of accounting for some business combinations. The adoption did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity. However, prospective business combinations, if any, will be significantly impacted by the adoption of this standard.

The Company adopted ASC No. 260, Earnings Per Share on January 1, 2009. This standard requires that unvested share-based payment awards that contain non-forfeitable rights to dividends or dividend equivalents (whether paid or unpaid) should be classified as participating securities and should be included in the computation of earnings per share pursuant to the two-class method. The adoption did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity.

The Company adopted ASC No. 825-10-65, Financial Instruments - Transition and Open Effective Date Information during the quarter ended June 30, 2009. This standard requires disclosures about fair value of financial instruments in interim financial statements as well as in annual financial statements. The Company provided the additional disclosure requirements. See Note 3 - Fair Value Measurements.

The Company adopted ASC No. 820-10-35, Fair Value Measurements and Disclosures - Subsequent Measurement during the quarter ended June 30, 2009. This standard discusses the provisions related to the determination of fair value when the volume and level of activity for the asset or liability have significantly decreased. ASC No. 820-10-35 provides additional guidance for estimating fair value when the volume and level of transaction activity for an asset or liability have significantly decreased in relation to normal market activity for the asset or liability. ASC No. 820-10-35 also includes guidance on identifying circumstances that may indicate a transaction is not orderly. ASC No. 820-10-35 emphasizes that even if there has been a significant decrease in the volume and level of activity for the asset or liability and regardless of the valuation technique(s) used, the objective of a fair value measurement remains the same. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date under current market conditions. The adoption did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity. See Note 3 - Fair Value Measurements.

The Company adopted ASC No. 320-10-65, Transition Related to Recognition and Presentation of Other-Than-Temporary Impairments during the quarter ended June 30, 2009. This standard amends the other-than-temporary impairment guidance for debt securities to make the guidance more operational and to improve the presentation and disclosure of other-than-temporary impairments in the financial statements. The most significant change is a revision to the amount of other-than-temporary loss of a debt security recorded in earnings. The adoption did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity.

F-18

---

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The Company adopted ASC No. 855, Subsequent Events during the quarter ended June 30, 2009. This standard should be applied to the accounting for and disclosure of subsequent events. This standard does not apply to subsequent events or transactions that are within the scope of other applicable GAAP that provide different guidance on the accounting treatment for subsequent events or transactions. ASC No. 855 applies to both interim financial statements and annual financial statements. The objective of ASC No. 855 is to establish general standards of accounting for and disclosures of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. In particular, this standard sets forth: 1) The period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements; 2) The circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements; and, 3) The disclosures that an entity should make about events or transactions that occurred after the balance sheet date. ASC No. 855 also requires entities to disclose the date through which they have evaluated subsequent events and whether the date corresponds with the release of their financial statements. The adoption did not have a material effect on the Company's consolidated financial position, consolidated results of operations, or liquidity. See Note 2 - Summary of Significant Accounting Policies for this new disclosure.

#### ***Recent Accounting Pronouncements***

In June 2009, the FASB issued ASC No. 860, Transfers and Servicing. ASC No. 860 will require entities to provide more information about sales of securitized financial assets and similar transactions, particularly if the seller retains some risk with respect to the assets. ASC No. 860 is effective for fiscal years beginning after November 15, 2009. The Company plans to adopt the provisions of ASC No. 860 on January 1, 2010 and does not believe adoption of this new standard will have a material effect on its consolidated financial position, consolidated results of operations, or liquidity.

In June 2009, the FASB issued ASC No. 810, Consolidation and ASU No. 2009-17, Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities. ASC No. 810 and ASU No. 2009-17 amends certain requirements to improve financial reporting by companies involved with variable interest entities and to provide more relevant and reliable information to users of financial statements. ASC No. 810 is effective for fiscal years beginning after November 15, 2009. The Company plans to adopt the provisions of ASC No. 810 on January 1, 2010 and does not believe adoption of this new standard will have a material effect on its consolidated financial position, consolidated

results of operations, or liquidity.

F-19

---



## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In October 2009, the FASB issued ASU No. 2009-13 on Topic 605, Revenue Recognition Multiple Deliverable Revenue Arrangements. The objective of this Update is to address the accounting for multiple-deliverable arrangements to enable vendors to account for products or services (deliverables) separately rather than as a combined unit. Vendors often provide multiple products or services to their customers. Those deliverables often are provided at different points in time or over different time periods. This Update provides amendments to the criteria in Subtopic 605-25 for separating consideration in multiple-deliverable arrangements. The amendments in this Update establish a selling price hierarchy for determining the selling price of a deliverable. The selling price used for each deliverable will be based on vendor-specific objective evidence (VSOE) if available, third-party evidence (TPE) if VSOE is not available, or estimated selling price if neither VSOE nor TPE is available. The amendments in this Update also will replace the term fair value in the revenue allocation guidance with selling price to clarify that the allocation of revenue is based on entity-specific assumptions rather than assumptions of a marketplace participant. This Update is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. The Company plans to adopt the provisions of this Update on January 1, 2011. The Company is currently evaluating the impact, if any, of this new accounting update on its consolidated financial position, consolidated results of operations, or liquidity.

In January 2010, the FASB issued ASU No. 2010-06, Improving Disclosures About Fair Value Measurements. This Update adds disclosure requirements about transfers into and out of Levels 1, 2, and 3, clarifies existing fair value disclosure requirements about the appropriate level of disaggregation, and clarifies that a description of the valuation technique (e.g., market approach, income approach, or cost approach) and inputs used to measure fair value is required for recurring, nonrecurring, and Level 2 and 3 fair value measurements. These provisions are effective for the Company's reporting period ending March 31, 2010. The Update also requires that Level 3 activity about purchases, sales, issuances, and settlements be presented on a gross basis rather than as a net number as currently required. This provision is effective for the Company's reporting period ending March 31, 2011. As this Update amends only the disclosure requirements for fair value measurements, the adoption will have no impact on its consolidated financial position, consolidated results of operations, or liquidity.

### **3. Fair Value Measurements**

The Company complies with the provisions of FASB ASC No. 820, Fair Value Measurements and Disclosures (ASC 820), in measuring fair value and in disclosing fair value measurements. ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements required under other accounting pronouncements. FASB ASC No. 820-10-35, Fair Value Measurements and Disclosures- Subsequent Measurement (ASC 820-10-35), clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. ASC 820-10-35-3 also requires that a fair value measurement reflect the assumptions market participants would use in pricing an asset or liability based on the best information available. Assumptions include the risks inherent in a particular valuation technique (such as a pricing model) and/or the risks inherent in the inputs to the model.

F-20

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

ASC 820-10-35 discusses valuation techniques, such as the market approach (comparable market prices), the income approach (present value of future income or cash flow), and the cost approach (cost to replace the service capacity of an asset or replacement cost). The statement utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

**Level 1 Inputs** Level 1 inputs are unadjusted quoted prices in active markets for assets or liabilities identical to those to be reported at fair value. An active market is a market in which transactions occur for the item to be fair valued with sufficient frequency and volume to provide pricing information on an ongoing basis.

**Level 2 Inputs** Level 2 inputs are inputs other than quoted prices included within Level 1. Level 2 inputs are observable either directly or indirectly. These inputs include: (a) Quoted prices for similar assets or liabilities in active markets; (b) Quoted prices for identical or similar assets or liabilities in markets that are not active, such as when there are few transactions for the asset or liability, the prices are not current, price quotations vary substantially over time or in which little information is released publicly; (c) Inputs other than quoted prices that are observable for the asset or liability; and (d) Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

**Level 3 Inputs** Level 3 inputs are unobservable inputs for an asset or liability. These inputs should be used to determine fair value only when observable inputs are not available. Unobservable inputs should be developed based on the best information available in the circumstances, which might include internally generated data and assumptions being used to price the asset or liability.

When determining the fair value measurements for assets or liabilities required or permitted to be recorded at and/or marked to fair value, the Company considers the principal or most advantageous market in which it would transact and considers assumptions that market participants would use when pricing the asset or liability. When possible, the Company looks to active and observable markets to price identical assets. When identical assets are not traded in active markets, the Company looks to market observable data for similar assets. Nevertheless, certain assets are not actively traded in observable markets and the Company must use alternative valuation techniques to derive a fair value measurement.

F-21

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following table summarizes the basis used to measure certain financial assets at fair value on a recurring basis in the consolidated balance sheet:

## Basis of Fair Value Measurements

<b>Balance at December 31, 2009</b>	<b>Total</b>	<b>Quoted Prices in Active Markets for Identical (Level 1)</b>	<b>Significant Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Trading securities - auction rate debt securities	\$ 53,397,179	\$	\$	\$ 53,397,179
Available-for-sale securities	\$ 47,959,920	\$ 47,959,920	\$	\$
Auction rate debt securities repurchase agreement	\$ 5,977,822	\$	\$	\$ 5,977,822

The following tables show reconciliations of the beginning and ending balances for assets measured at fair value on a recurring basis using significant unobservable inputs (i.e. Level 3):

<b>Trading Securities</b>	<b>Auction Rate Debt Securities</b>	<b>Fair Value Measurements Using Significant Unobservable Inputs</b>
Beginning of period		\$ 52,650,654
Sale of trading securities for the year ended December 31, 2009		(3,499,999 )
Net unrealized gains on trading securities for the year ended December 31, 2009		4,246,524
Fair value of trading securities - auction rate debt securities at December 31, 2009		\$ 53,397,179

F-22

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>Fair Value Measurements Using Significant Unobservable Inputs</b>
<b>Auction Rate Debt Securities Repurchase Agreement</b>	
Beginning of period	\$ 10,224,346
Change in fair value of auction rate debt securities repurchase agreement for the year ended December 31, 2009	(4,246,524)
Fair value of auction rate debt securities repurchase agreement at December 31, 2009	\$ 5,977,822

The following summarizes the valuation technique for assets measured and recorded at fair value:

Available-for-sale securities: For our level 1 securities, which represent Federal treasury securities, fair value is based on quoted market prices.

Trading securities – auction rate debt securities and auction rate debt securities repurchase agreement: The securities valued using unobservable inputs were the auction rate debt securities and auction rate debt securities repurchase agreement as the financial and capital markets have experienced significant dislocation and illiquidity in regard to these types of instruments and there is currently no secondary market for these types of securities. There have been no successful auctions since early 2008. The valuation of these auction rate debt securities and auction rate debt securities repurchase agreement is an estimate based upon factors specific to these securities, including duration, tax status (taxable or tax-exempt), credit quality, the existence of insurance wraps, and the composition of the underlying student loans (Federal Family Education Loan Program or private loans). Assumptions were made about future cash flows based upon interest rate formulas as described above. Also, the valuation included estimates of market data including yields or spreads of similar trading instruments, when available, or assumptions believed to be reasonable

for non-observable inputs such as likelihood of redemption. Actual transactions involving these securities and/or future valuations could differ from the estimated fair value of these securities at December 31, 2009.

F-23

---



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****4. Available-for-Sale Securities**

The amortized cost and fair value of the Company's available-for-sale securities as of December 31, 2009 were as follows:

	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Value</b>
U.S. Treasury Securities	\$ 47,864,122	\$ 95,798	\$	\$ 47,959,920

The amortized cost and fair value of the Company's available-for-sale securities as of December 31, 2008 were as follows:

	<b>Amortized Cost</b>	<b>Gross Unrealized Gains</b>	<b>Gross Unrealized Losses</b>	<b>Fair Value</b>
U.S. Treasury Securities	\$ 23,616,845	\$ 227,105	\$	\$ 23,843,950

There were no unrealized losses in the available-for-sale securities portfolio at December 31, 2009 and 2008, respectively. The contractual maturities of available-for-sale securities are all in the year ended December 31, 2010 for balances as of December 31, 2009, and December 31, 2009 for balances as of December 31, 2008.

Edgar Filing: PLUG POWER INC - Form 10-K

The Company recognized gross gains, gross losses and proceeds on available-for-sale securities for each of the years ended December 31 as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Proceeds on sales	\$ 3,699,149	\$ 159,849,925	\$ 24,859,823
Proceeds on maturities	133,856,781	106,924,255	531,780,745
Gross realized gains	-	404,074	162,890
Gross realized losses	-	14,890	45,227

F-24

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****5. Property, Plant and Equipment**

Property, plant and equipment at December 31, 2009 and 2008 consist of the following:

	<b>December 31, 2009</b>	<b>December 31, 2008</b>
Land	\$ 90,000	\$ 90,000
Buildings	14,557,080	14,557,080
Building improvements	8,784,867	8,615,636
Software, machinery and equipment	16,131,696	29,779,651
	39,563,643	53,042,367
Less accumulated depreciation and amortization	(25,220,903 )	(35,272,393 )
Property, plant, and equipment, net	\$ 14,342,740	\$ 17,769,974

Depreciation expense was \$3.4 million, \$4.4 million and \$3.7 million for the years ended December 31, 2009, 2008 and 2007, respectively, and was included in research and development and selling, general and administrative expenses on the accompanying consolidated statements of operations.

**6. Goodwill and Other Intangible Assets**

Goodwill is tested for impairment annually or more frequently when events or circumstances indicate that the carrying value more likely than not exceeds its fair value. There was no carrying amount of goodwill or changes in the carrying amount of goodwill for the year ended December 31, 2009 as a result of the full impairment charge recorded in 2008. As a result of the uncertain economic environment in general and the decline in our stock price during the fourth

quarter of 2008, indicative of a potential devaluation of the Company's assets, the Company performed a goodwill impairment assessment under FASB ASC No. 350, Intangibles—Goodwill and Other. As a result of this assessment, the Company determined that a goodwill impairment occurred and recorded an impairment charge of \$45.8 million during the year ended December 31, 2008.

The test for goodwill impairment, as defined by FASB ASC No. 350 is a two-step approach. The first step of the goodwill impairment test requires a determination of whether or not the fair value of goodwill is less than its carrying value. If so, the second step is required, which involves an analysis reflecting the allocation of the fair value determined in the first step (as if it was the purchase price in a business combination). This process may result in the determination of a new amount of goodwill. If the calculated fair value of the goodwill resulting from this allocation is lower than the carrying value of the goodwill in the reporting unit, the difference is reflected as a non-cash impairment loss. The purpose of the second step is only to determine the amount of goodwill that should be recorded on the consolidated balance sheet. The recorded amounts of other items on the consolidated balance sheet are not adjusted.

F-25

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

We estimate the fair value of our single reporting unit using market and income valuation approaches. The market valuation approach estimates our enterprise value, which is comprised of our market capitalization. The income valuation approach estimates our enterprise value using a net present value model, which discounts projected free cash flows (DCF) of our business at a computed weighted average cost of capital as the discount rate.

In the fourth quarter of 2008, as a result of completing the first step of the goodwill impairment test, we determined that the carrying value of our goodwill exceeded its fair value, which required us to perform the second step of the goodwill impairment test. The second step of the goodwill impairment test, which included consideration of the Company's market capitalization as well as discounted cash flow projections and estimations of the fair values of identified assets and liabilities and intangible assets with estimated useful lives, indicated that goodwill was impaired and we recorded a non-cash goodwill impairment charge of \$45.8 million, all of which was classified as goodwill impairment in the accompanying 2008 consolidated statement of operations.

Identifiable intangible assets which have indefinite lives are tested at least annually for impairment. As a result of the uncertain economic environment in general and the further decline in our stock price, the Company performed an impairment assessment in accordance with FASB ASC No. 360-10-35-15 as of December 31, 2009 and 2008 and determined that no impairment exists.

Intangible assets consisting of acquired technology and customer relationships related to the Cellex and General Hydrogen acquisitions during the year ended December 31, 2007 are amortized using a straight-line method over their useful lives of 8 years. On January 1, 2008, General Hydrogen (Canada) Corporation, Plug Power Canada Inc. and Cellex Power Products, Inc. amalgamated as Plug Power Canada Inc.

The gross carrying amount and accumulated amortization of the Company's acquired identifiable intangible assets as of December 31, 2009 are as follows:

	<b>Weighted Average Amortization Period</b>	<b>Gross Carrying Amount</b>	<b>Accumulated Amortization</b>	<b>Effect of Foreign Currency Translation</b>	<b>Total</b>
Acquired Technology	8 years	\$ 15,900,000	\$ (5,638,057 )	\$ 893,220	\$ 11,155,163
Customer Relationships	8 years	1,000,000	(333,333 )		666,667
		\$ 16,900,000	\$ (5,971,390 )	\$ 893,220	\$ 11,821,830

F-26

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Amortization expense for acquired identifiable intangible assets for the years ended December 31, 2009, 2008, and 2007 was \$2.1 million, \$2.2 million, and \$1.6 million, respectively. Estimated amortization expense for subsequent years is as follows:

2010	\$ 2,238,087
2011	2,238,087
2012	2,238,087
2013	2,238,087
2014	2,238,087
Thereafter	631,395
Total	\$ 11,821,830

**7. Credit Line Agreement and Auction Rate Debt Securities Repurchase Agreement**

In December 2008, the Company entered into a Credit Line Agreement with a third-party lender with a maximum availability of \$62.9 million. The Company's auction rate debt securities included in trading securities on the consolidated balance sheets are pledged as collateral for the Credit Line Agreement. As of December 31, 2008, the Company had drawn down \$62.9 million on this line of credit. During the year ended December 31, 2009, \$3.5 million of auction rate debt securities were sold by the third-party lender holding the collateral which resulted in a corresponding reduction in amounts outstanding under the Credit Line Agreement. The fair value of the auction rate debt securities is \$53.4 million and \$52.7 million at December 31, 2009 and 2008, respectively. The Credit Line Agreement bears interest at a variable rate equal to the average rate of interest earned by the Company on the auction rate debt securities pledged as collateral for the Credit Line Agreement. The interest rate on the line of credit advances was 1.2% and 2.4% at December 31, 2009 and 2008, respectively. Interest expense on the advances on the Credit Line Agreement was approximately \$915,000 for the year ended December 31, 2009 and between its origination in December 2008 through December 31, 2008 was not significant.

The advances on the Credit Line Agreement are repayable on demand by the third-party lender. If the third-party lender exercises its right to demand repayment of the advances under the Credit Line Agreement prior to June 30, 2010 (the date upon which the Company can first exercise its rights under the Repurchase Agreement discussed

below), the third-party lender is required to arrange alternative financing on terms substantially the same as the Credit Line Agreement or the third party lender must repurchase the auction rate debt securities pledged as collateral for the Credit Line Agreement at their par value, which is \$59.4 million and \$62.9 million at December 31, 2009 and 2008, respectively.

F-27

---



## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

In December 2008, the Company also entered into a Repurchase Agreement with the third-party lender such that the Company may require the third-party lender to repurchase the auction rate debt securities pledged as collateral for the Credit Line Agreement, at their par value, from June 30, 2010 through July 2, 2012 as full settlement for the advances on the Credit Line Agreement. The Company has elected to record this item at its fair value in accordance with ASC No. 825-10-25 to allow consistent treatment of this repurchase agreement and the underlying collateral. At December 31, 2009 and 2008 the fair value of this item is approximately \$6.0 million and \$10.2 million, respectively and is recorded as an asset on the consolidated balance sheets. The change in the fair value of the Repurchase Agreement for the year ended December 31, 2009 was \$4.2 million and is recorded as a realized loss on the consolidated statements of operations. The change in fair value of the Repurchase Agreement between its origination in December 2008 through December 31, 2008 was not significant.

#### **8. Debt and Lease Arrangement**

In March, 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. for the purpose of financing its investment in equipment that was leased to its customer, Central Grocers, beginning on April 1, 2009. Monthly installments of \$32,900 are due through March 2014 and the note bears interest at a fixed rate of 7.23% per annum on a 360-day year. The Company was initially required to pledge \$1.8 million in cash to collateralize the debt, which will decrease over time in accordance with decreases in the outstanding balance of the debt. This note is also secured by the equipment that is leased to Central Grocers as described in the Master Security Agreement and Collateral Schedule No. 01 dated as of March 20, 2009, together known as the Master Security Agreement.

The outstanding balance of the debt as of December 31, 2009 is \$1.4 million and is recorded as current portion of long term debt and long term debt in the consolidated balance sheets. Restricted cash and the amount of the corresponding pledge requirement as of December 31, 2009 was \$1.7 million and is recorded within restricted cash in the consolidated balance sheets. Principal payments due on long-term debt over the next five fiscal years are as follows: 2010, \$300,000; 2011, \$323,000; 2012, \$347,000; 2013, \$373,000; and 2014 \$98,000.

On April 1, 2009, the Company began leasing this same equipment to its customer, Central Grocers. The terms of the arrangement are 60 monthly installments of \$32,900. Upon expiration of the 60 months (initial term of the lease), Central Grocers has the option to renew the lease for an additional five years at mutually agreed upon pricing, to purchase all equipment for a purchase price equal to the then fair market value thereof, or to return the equipment to the Company. The Company shall provide maintenance in accordance with the lease agreement.

In July 2009, the Company signed a letter of credit with Key Bank in the amount of \$525,000. The standby letter of credit is required by the agreement negotiated between Air Products and Chemicals, Inc. (Air Products) and the Company to supply hydrogen infrastructure and hydrogen to Central Grocers at their distribution center. The standby letter of credit is collateralized by cash held in a restricted account.

In October 2009, the Company entered into a 15 month financing arrangement for an electrolyzer. The outstanding balance of the debt as of December 31, 2009 was approximately \$123,000 and is recorded as current portion of long term debt and long term debt in the consolidated balance sheets.

F-28

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****9. Accrued Expenses**

Accrued expenses at December 31, 2009 and 2008 consist of:

	<b>2009</b>	<b>2008</b>
Accrued payroll and compensation related costs	\$ 2,310,273	\$ 2,694,177
Accrued restructuring costs	1,694,456	4,393,085
Other accrued liabilities	1,842,812	2,858,054
	<b>\$ 5,847,541</b>	<b>\$ 9,945,316</b>

**10. Repayable Government Assistance**

During the year ended December 31, 2000, the Company's wholly-owned subsidiary, Plug Power Canada Inc., formerly known as Cellex Power Products Inc., entered into an Industrial Research Assistance Program (IRAP) Repayable Contribution Agreement with the National Research Council of Canada (NRC) under which it received contributions totaling Cdn\$500,000 for certain development activities. The agreement with the NRC provides for payment of royalties of up to 170% of the contributions received subject to certain conditions, payable quarterly, calculated at 3.5% of gross revenues. Plug Power Canada's repayment obligation to the NRC existed from July 1, 2002 to March 31, 2009. At April 1, 2009, if the total amount repaid to the NRC was less than the Cdn\$500,000 contribution, then Plug Power Canada would continue to make payments to the NRC until either the full Cdn\$500,000 is repaid or until July 1, 2012, whichever comes first. The maximum liability under this repayment obligation is Cdn\$850,000. If at any point Plug Power Canada's repayments reach this amount, the obligation shall cease.

At April 1, 2009, the total amount repaid to the NRC was less than the Cdn\$500,000 contribution, therefore Plug Power Canada will continue to make payments to the NRC until either the full Cdn\$500,000 is repaid or until July 1, 2012, whichever comes first. The Company has recorded the estimate of amounts owed under this arrangement as a debt, with royalty payments recorded as a reduction of the debt.

Accordingly, liabilities relating to this agreement in the amount of \$0 and \$119,408 have been recorded as repayable government assistance and current portion of repayable government assistance (other current liabilities), respectively, in the consolidated balance sheets as of December 31, 2009 and \$173,138 and \$369,331 have been recorded as repayable government assistance and current portion of repayable government assistance (other current liabilities), respectively, in the consolidated balance sheets as of December 31, 2008. The imputed interest is recorded as interest expense in the consolidated statement of operations.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

General Hydrogen Corporation and its wholly owned subsidiary General Hydrogen (Canada) Corporation, and Cellex Power Products, Inc. each entered into agreements with Technology Partnerships Canada (TPC) during the year ended December 31, 2005 for the development of early market fuel cell applications. On December 31, 2007, General Hydrogen Corporation merged with Plug Power Inc. and, subsequently, Plug Power Inc. contributed the wholly owned subsidiary General Hydrogen (Canada) Corporation to Plug Power Canada Inc. On January 1, 2008, General Hydrogen (Canada) Corporation, Plug Power Canada Inc. and Cellex Power Products, Inc. amalgamated as Plug Power Canada Inc.

On September 30, 2008 Plug Power Inc., Plug Power Canada Inc., and TPC entered into Assumption and Termination Agreements related to both the Cellex TPC Agreement and the General Hydrogen TPC Agreement. In consideration of the Assumption and Termination Agreements, Plug Power Inc. and Plug Power Canada Inc agreed to pay \$2,235,244 to TPC. As a result of this agreement, the Company recorded a gain on the termination of these agreements in the amount of \$1,232,522 in interest and other income and net realized gains from available-for-sale securities in the consolidated statement of operations for 2008.

**11. Restructuring Charges**

On June 10, 2008, the Company undertook a restructuring as part of its plan to become a market and sales driven organization. The Company has refocused on the GenDrive motive power product where there has been significant customer interest in fuel cell power units. As part of the restructuring, the Company has reduced its workforce, cut back discretionary spending, and deferred non strategic projects. The Company recorded restructuring charges in the amount of \$3,744,801 within selling, general and administrative expenses in the consolidated statement of operations for 2008. The Company recorded additional restructuring charges in the amount of \$537,819 within selling, general and administrative expenses in the consolidated statement of operations for the year ended December 31, 2009 related to costs incurred to consolidate facilities based upon the Company's discontinued use of the leased premises. At December 31, 2009, \$765,190 remains in accrued expenses on the consolidated balance sheets.

The accrued restructuring charges relating to the June 2008 restructuring are comprised of the following at December 31, 2009:

Accrued	Adjustments to	Cash Payments	Accrued
---------	----------------	---------------	---------

	<b>restructuring charges at January 1, 2009</b>	<b>or additional accrued restructuring charges</b>		<b>restructuring charges at December 31, 2009</b>
Personnel Related	\$ 38,621	\$ (22,737)	\$ (15,884)	\$
Contract Cancellation	364,100		(1,556)	362,544
Net Lease Obligations		537,819	(135,173)	402,646
Total	\$ 402,721	\$ 515,082	\$ (152,613)	\$ 765,190

F-30

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

On December 18, 2008, the Company adopted a restructuring plan intended to focus the Company on revenue growth, improve organizational efficiency and position the Company for long-term profitability. As part of this plan, the Company implemented a reduction in workforce by eliminating 90 positions in addition to terminating purchase commitments and charging off inventory related to lapsed product lines. The Company recorded restructuring charges in the amount of \$3,990,364 within selling, general and administrative expenses and \$2,295,370 in cost of product and service revenue in the consolidated statement of operations for 2008. The Company recorded an adjustment to accrued restructuring charges in the amount of \$305,044 within selling, general and administrative expenses in the consolidated statement of operations for year ended December 31, 2009 to revise previous estimates. At December 31, 2009, \$929,266 remains in accrued expenses on the consolidated balance sheets. The accrued restructuring charges related to the December 2008 restructuring are comprised of the following at December 31, 2009:

	<b>Accrued restructuring charges at January 1, 2009</b>	<b>Adjustments to accrued restructuring charges</b>	<b>Cash Payments</b>	<b>Accrued restructuring charges at December 31, 2009</b>
Personnel Related	\$ 2,653,597	\$ (116,805)	\$ (2,520,792)	\$ 16,000
Contract Cancellation	1,336,767	(188,239)	(235,262)	913,266
Total	\$ 3,990,364	\$ (305,044)	\$ (2,756,054)	\$ 929,266

**12. Income Taxes**

The components of income/(loss) before income taxes and the provision for income taxes for the years ended December 31, 2009, 2008 and 2007 are as follows:

	<b>2009</b>		<b>2008</b>		<b>2007</b>
Income/(loss) before income taxes:					
United States	\$ (39,363,000 )		\$ (95,363,000 )		\$ (55,506,000 )
Foreign	(1,346,000 )		(26,337,000 )		(5,065,000 )
	\$ (40,709,000 )		\$ (121,700,000 )		\$ (60,571,000 )

F-31

---



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

There was no current income tax expense for the years ended December 31, 2009, 2008 and 2007. The Company was a Limited Liability Company (LLC) until its merger into Plug Power Inc. effective November 3, 1999. From inception through November 3, 1999, the Company was treated as a partnership for federal and state income tax purposes and accordingly the Company's income taxes or credits resulting from earnings or losses were payable by, or accrued to its members. Therefore, no provision for income taxes has been made prior to November 3, 1999.

Effective November 3, 1999, the Company is taxed as a corporation for Federal and State income tax purposes and the effect of deferred taxes recognized as a result of the change in tax status of the Company have been included in operations. Deferred tax assets and liabilities are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates.

The Company's effective income tax rate differed from the Federal statutory rate as follows:

	<b>Years ended December 31,</b>					
	<b>2009</b>		<b>2008</b>		<b>2007</b>	
U.S. Federal statutory tax rate	(35.0	)%	(35.0	)%	(35.0	)%
Deferred state taxes, net of federal benefit	(2.9	)	(1.8	)	(2.8	)
Other, net	(0.8	)	0.1			
Goodwill impairment charge			12.3			
Foreign tax rate differential	0.2		0.8		2.6	
Expiring attribute carryforward			0.7		2.4	
Adjustment to opening deferred tax balance	(4.3	)	0.8		(0.4	)
Tax credits (net of monetization)	0.7		(0.3	)	(1.6	)
Change in valuation allowance	42.1		22.4		34.8	
	0.0	%	0.0	%	0.0	%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of certain assets and liabilities for financial reporting and the amounts used for income tax expense purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2009 and 2008 are as follows:



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>U.S.</b>		<b>Foreign</b>	
	<b>Years ended December 31,</b>		<b>Years ended December 31,</b>	
	<b>2009</b>	<b>2008</b>	<b>2009</b>	<b>2008</b>
Deferred tax assets and liabilities:				
Intangible assets	\$340,574	\$(2,023,365 )	\$ (372,240 )	\$ (1,823,521)
Non-employee stock-based compensation	(1,043,476 )	(500,642 )		
Gain on auction rate debt securities repurchase agreement	(1,613,679 )	(3,885,251 )		
Impairment loss on available-for-sale securities	1,613,679	3,885,251		
Deferred revenue	1,746,752	2,058,774		
Other reserves and accruals	572,913	1,792,292	123,196	44,049
Capital loss carryforwards	5,883,889	5,883,889		
Research and development tax credit carryforwards	9,559,233	9,858,749	1,490,302	1,209,903
Property, plant and equipment	368,953	124,061	170,778	541,233
Amortization of stock-based compensation	7,211,439	6,603,377		
Research and development expenditures	16,796,000	15,960,000	3,613,615	3,309,462
Repayable government assistance			29,852	141,042
Net operating loss carryforwards	203,699,706	188,726,938	2,877,873	3,024,891
Total deferred tax asset	245,135,983	228,484,073	7,933,376	6,447,059
Less valuation allowance	(245,135,983 )	(228,484,073 )	(7,933,376 )	(6,447,059)
Net deferred tax assets	\$	\$	\$	\$

The Company has recorded a valuation allowance, as a result of uncertainties related to the realization of its net deferred tax asset, at December 31, 2009 and 2008 of approximately \$253.1 million and \$234.9 million, respectively. A reconciliation of the current year change in valuation allowance is as follows:



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>Total</b>	<b>U.S.</b>	<b>Foreign</b>
Increase in valuation allowance for current year increase in net operating losses	\$ 15,482,935	\$ 14,972,768	\$ 510,167
Increase in valuation allowance for current year net increase in deferred tax assets other than net operating losses	1,978,073	1,679,142	298,931
Increase in valuation allowance as a result of foreign currency fluctuation	1,021,945		1,021,945
Decrease in valuation allowance as a result of change in foreign tax rate	(288,842 )		(288,842 )
Decrease in valuation allowance due to current year change of deferred tax assets as the result of uncertain tax positions	(55,884 )		(55,884 )
Net increase in valuation allowance	\$18,138,227	\$16,651,910	\$1,486,317

The deferred tax assets have been offset by a full valuation allowance because it is more likely than not that the tax benefits of the net operating loss carryforwards and other deferred tax assets may not be realized. Included in the valuation allowance as of December 31, 2009 and December 31, 2008 are \$14.3 million of deferred tax assets resulting from the exercise of employee stock options, which upon subsequent realization of the tax benefits, will be allocated directly to paid-in capital.

At December 31, 2009, the Company has unused Federal and State net operating loss carryforwards of approximately \$640 million, of which \$76.7 million was generated from the operations of H Power during the period May 31, 1989, through the date of the H Power acquisition, \$2.7 million was generated by Cellex through the date of the Cellex acquisition, \$44.1 million was generated by General Hydrogen through the date of the General Hydrogen acquisition, and \$516.5 million was generated by the Company during the period October 1, 1999 through December 31, 2009.

The net operating loss carryforwards if unused will expire from 2010 through 2029. In 2009, net operating loss carryforwards of \$1.9 million acquired as part of the H Power transaction expired.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Under Internal Revenue Code (IRC) Section 382, the use of loss carryforwards may be limited if a change in ownership of a company occurs. If it is determined that due to transactions involving the Company's shares owned by its 5 percent shareholders a change of ownership has occurred under the provisions of IRC Section 382, the Company's Federal and state net operating loss carryforwards could be subject to significant IRC Section 382 limitations.

Based upon an existing IRC Section 382 study, a previous Section 382 ownership change occurred in 2005 that resulted in approximately \$479 million of the \$640 million of Federal and state net operating loss carryforwards being subject to IRC Section 382 limitations and as the result of IRC Section 382 limitations, approximately \$53.7 million of the net operating loss carryforwards acquired from H Power will expire prior to utilization, and approximately \$27 million of the net operating loss carryforwards acquired from General Hydrogen will expire prior to utilization. Additionally, approximately \$25 million of H Power's remaining net operating loss carryforwards represent an unrecognized tax benefit. As a result of the IRC Section 382 limitations and the unrecognized tax benefits, these net operating loss carryforwards are not reflected in the Company's deferred tax asset as of December 31, 2009.

During the fourth quarter of 2009, as a result of certain equity transactions, the Company may have had an ownership change for IRC Section 382 purposes. If a change occurred in the fourth quarter, an IRC Section 382 limitation could result in as much as approximately \$458.6 million of the Company's Federal and state net operating loss carryforwards expiring prior to utilization, which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$174.3 million. Additionally, if a change in control occurred during the fourth quarter an IRC Section 382 limitation could result in as much as approximately \$15 million of Federal research and experimentation tax credit carryforwards expiring prior to utilization (of which \$5.7 million represents an uncertain tax position), which would result in the Company's deferred tax asset and valuation allowance decreasing by approximately \$9.3 million. These decreases would have no impact on the Company's financial position, results of operations, or cash flows. However, these potential future tax benefits would no longer be available to the Company. The Company is in the process of completing a formal IRC Section 382 study to determine if an ownership change has occurred.

At December 31, 2009, the Company has Federal capital loss carryforwards of approximately \$15.5 million available to offset future capital gains that will expire at various dates in 2011. At December 31, 2009, the Company has US Federal Research and Experimentation credit carryforwards of approximately \$15.3 million available to offset future income tax that will expire at various dates from 2020 through 2029. Approximately \$5.7 million of the Company's Research and Experimentation carryforwards represent an unrecognized tax benefit and are therefore, not reflected in the Company's deferred tax asset as of December 31, 2009.

At December 31, 2009, the Company has unused foreign net operating loss carryforwards of approximately \$15.0 million. The net operating loss carryforwards if unused will expire at various dates from 2010 through 2027. At

December 31, 2009, the Company has Scientific Research and Experimental Development expenditures of \$21.2 million available to offset future taxable income. These expenditures have no expiry date. At December 31, 2009, the Company has Canadian investment tax credit (ITC) carryforwards of \$2.3 million available to offset future income tax. These credit carryforwards if unused will expire at various dates from 2010 through 2026. Approximately \$3.5 million of the net operating loss carryforwards, \$6.7 million of the Scientific Research and Experimental Development expenditures and \$822,000 of the Canadian ITC credit carryforwards represent unrecognized tax benefits and are therefore, not reflected in the Company's deferred tax asset as of December 31, 2009.

The Company intends to reinvest indefinitely its unrepatriated foreign earnings. As of December 31, 2009, the Company has no unrepatriated foreign earnings. The Company has not provided for US income taxes on these undistributed earnings of its foreign subsidiaries because management considers such earnings to be reinvested indefinitely outside of the U.S. If the earnings were distributed, the Company may be subject to both foreign withholding taxes and U.S. income taxes that may not be fully offset by foreign tax credits. Determination of the amount of this unrecognized deferred income tax liability is not practical.



**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Unrecognized tax benefits balance at beginning of year	\$18,149,125	\$16,119,790	\$15,200,161
Additions for tax positions of prior years		2,518,182	866,762
Reductions based on tax positions related to the current year			(23,485)
Reductions for tax positions of prior years	(55,884)		
Settlements			
Currency translation	476,936	(488,847)	76,352
Unrecognized tax benefits balance at end of year	\$18,570,177	\$18,149,125	\$16,119,790

The Company recognizes accrued interest and penalties related to unrecognized tax benefits as a component of income tax expense. During the year ended December 31, 2009, the Company recognized \$0 in interest and penalties. The Company had \$1.2 million in interest and penalties accrued at December 31, 2009.

The Company files income tax returns in the U.S. federal jurisdiction and various state and foreign jurisdictions. In the normal course of business the Company is subject to examination by taxing authorities. Open tax years in the U.S. range from 2006 to 2009. Open tax years in the foreign jurisdictions range from 2003 to 2009. However, upon examination in subsequent years, if net operating losses carryforwards and tax credit carryforwards are utilized, the U.S. and foreign jurisdictions can reduce net operating loss carryforwards and tax credit carryforwards utilized in the year being examined if they do not agree with the carryforward amount. As of December 31, 2009, the Company was

not under audit in the U.S. or non-U.S. taxing jurisdictions. No significant changes to the amount of unrecognized tax benefits are anticipated within the next twelve months.

F-36

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**13. Stockholders Equity**

The Company has financed our operations from inception through December 31, 2009 primarily from the sale of equity (including those related to stock-based compensation less stock issuance costs), which has provided cash in the amount of \$636.4 million. This includes a net \$214.4 million as a result of our June 29, 2006 transaction with Smart Hydrogen Inc. (the Buyer). The Company sold 395,000 shares of Class B Capital Stock, a class of preferred stock of the Company, which were convertible into 39,500,000 shares of common stock of the Company, and 11,240 shares of common stock of the Company to the Buyer.

In December 2008, Smart Hydrogen Inc. sold to OJSC (Third Generation Company of the Wholesale Electricity Market) (OGK-3) all 395,000 shares of the Company's Class B Capital Stock as well as 5,126,939 shares of the Company's common stock. This sale triggered the automatic conversion of the Company's Class B Capital Stock into 39,500,000 shares of common stock, and the termination of all the rights and obligations attached to the Class B Capital Stock. The rights and obligations attached to the Class B Capital Stock that terminated included, but were not limited to, the right to appoint directors, veto rights and voting support obligations under the Investor Rights Agreement dated as of June 29, 2006, as amended (the Investor Rights Agreement). OGK-3 has executed a joinder agreement to the Investor Rights Agreement and is prohibited from transferring its shares of the Company's Common Stock to a competitor of the Company. OGK-3 is also bound by the same standstill provisions that applied to Smart Hydrogen, as set forth in the Investor Rights Agreement. This transfer and conversion triggered a change of control pursuant to Section 17 of our 1999 Stock Option and Incentive Plan; and, therefore, each outstanding Stock Option Right automatically became fully exercisable and conditions and restrictions on each outstanding Restricted Stock Award, Deferred Stock Award and Performance Share Award that relates solely to the passage of time and continued employment were removed.

***Preferred Stock***

The Company has authorized 5.0 million shares of preferred stock, par value \$.01 per share. The Company's certificate of incorporation provides that shares of preferred stock may be issued from time to time in one or more series. The Company's Board of Directors is authorized to fix the voting rights, if any, designations, powers, preferences, qualifications, limitations and restrictions thereof, applicable to the shares of each series. As of December 31, 2009, there were no shares of preferred stock issued and outstanding.

The Company has registered Series A Junior Participating Cumulative Preferred Stock, par value \$.01 per share. As of December 31, 2009 there were no shares of Series A Junior Participating Cumulative Preferred Stock issued and outstanding.

***Common Stock***

The Company has one class of common stock, par value \$.01 per share. Each share of the Company's common stock is entitled to one vote on all matters submitted to stockholders. As of December 31, 2009 there were 130,591,236 shares of common stock issued and outstanding.

F-37

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

The following represents changes in stockholders' equity since inception.

	No. of Preferred Shares	No. of Common Shares	No. of Treasury Shares	Cash Contributions	Noncash Contributions	Total Capital Contributions	Accumulated Other Comprehensive Income (Loss)	Deficit Development Stage	Treas Stock	Total Stockholders' Equity
<b>1997</b>										
Net Loss	-	-	-	\$	-\$	-\$	-\$	-\$ (5,903,340)	\$	-\$ (5,903,340)
DTE Energy Company (Issuance at 1.00 per share)	-	4,750,000	-	4,750,000		4,750,000	-	-	-	4,750,000
Mechanical Technology Incorporated	-	4,750,000	-	-	4,750,000 (a)	4,750,000	-	-	-	4,750,000
	-	9,500,000	-	4,750,000	4,750,000	9,500,000	(5,903,340)	-	-	3,596,660
<b>1998</b>										
Net Loss	-	-	-	-	-	-	-	(9,615,963)	-	(9,615,963)
DTE Energy Company	-	4,950,000	-	7,750,000		7,750,000	-	-	-	7,750,000
Mechanical Technology Incorporated	-	2,700,000	-	3,000,000	550,000 (b)	3,550,000	-	-	-	3,550,000
Stock based compensation and other noncash transactions	-	-	-	-	212,000 (c)	212,000	-	-	-	212,000
	-	7,650,000	-	10,750,000	762,000	11,512,000	(9,615,963)	-	-	1,896,037
<b>1999</b>										
Net Loss	-	-	-	-	-	-	-	(33,469,312)	-	(33,469,312)
	-	4,004,315	-	28,697,782		28,697,782	-	-	-	28,697,782

Edison Development Corporation Mechanical Technology Incorporated	-	6,254,315	-	24,000,000	8,897,782	32,897,782	-	-	32,897,782
General Electric Company	-	5,250,000	-	37,500,000	11,250,000	48,750,000	-	-	48,750,000
Other private investors	-	3,549,850	-	25,045,000	25,045,000	25,045,000	-	-	25,045,000
Initial public offering-net	-	6,782,900	-	92,971,878	92,971,878	92,971,878	-	-	92,971,878
Stock option exercises	-	24,128	-	41,907	41,907	41,907	-	-	41,907
Stock based compensation and other noncash transactions	-	-	-	-	978,800	(c) 978,800	-	-	978,800
	-	25,865,508	-	208,256,167	2,672,382	211,238,349	(33,469,312)	-	195,913,837

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	No. of Preferred Shares	No. of Common Shares	No. of Treasury Shares	Cash Contribution	Noncash Contribution	Total Capital Contribution	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage
<b>2000</b>								
Net Loss	-	-	-	-	-	-	-	(86,241,899)
Stock option exercises	-	632,378	-	3,793,028	-	3,793,028	-	-
Stock issued under employee stock purchase plan	-	32,717	-	408,452	-	408,452	-	-
Stock issued for development agreement	-	104,869	-	-	5,000,000 (d)	5,000,000	-	-
Stock issued for equity in affiliate	-	7,000	-	-	827,750 (e)	827,750	-	-
Stock based compensation and other noncash transactions	-	3,041	-	-	8,936,779 (c)	8,936,779	-	-
	-	780,005	-	4,201,480	14,764,529	18,966,009	-	(86,241,899)
<b>2001</b>								
Net Loss	-	-	-	-	-	-	-	(73,112,027)
Edison Development Corporation	-	416,666	-	4,800,000	-	4,800,000	-	-
General Electric Company	-	416,666	-	4,800,000	-	4,800,000	-	-
Public offering-net	-	4,575,000	-	51,588,551	-	51,588,551	-	-
Stock option exercises	-	760,531	-	2,051,954	-	2,051,954	-	-
Stock issued under employee stock purchase	-	73,132	-	730,592	-	730,592	-	-

Edgar Filing: PLUG POWER INC - Form 10-K

plan								
Stock issued for development agreement	-	96,336	-	-	3,000,000 (d)	3,000,000	-	-
Stock option issued to affiliate	-	-	-	-	5,000,000 (f)	5,000,000	-	-
Stock based compensation and other noncash transactions	-	189,084	-	-	2,013,177 (c)	2,013,177	-	-
	-	6,527,415	-	63,971,097	10,013,177	73,984,274	-	(73,112,027)
<b>2002</b>								
Net Loss	-	-	-	-	-	-	-	(47,218,326)
Stock option exercises	-	138,567	-	708,931	-	708,931	-	-
Stock issued under employee stock purchase plan	-	78,208	-	395,679	-	395,679	-	-
Stock issued for development agreement	-	243,383	-	-	2,000,000 (d)	2,000,000	-	-
Stock based compensation and other noncash transactions	-	213,987	-	-	1,807,593 (c)	1,807,593	-	-
	-	674,145	-	1,104,610	3,807,593	4,912,203	-	(47,218,326)
<b>2003</b>								
Net Loss	-	-	-	-	-	-	-	(53,038,802)
Public offering, net	-	11,700,000	-	54,967,204	-	54,967,204	-	-
Stock option exercises	-	35,033	-	84,973	-	84,973	-	-
Stock issued under employee stock purchase plan	-	90,380	-	348,605	-	348,605	-	-
Stock issued in acquisition of H Power	-	9,063,080	-	-	46,260,576 (g)	46,260,576	-	-
Stock based compensation	-	965,143	-	-	2,966,797 (c)	2,966,797	-	-
	-	21,853,636	-	55,400,782	49,227,373	104,628,155	-	(53,038,802)
<b>2004</b>								
Net Loss	-	-	-	-	-	-	-	(46,738,827)



Edgar Filing: PLUG POWER INC - Form 10-K

Stock option exercises	-	95,960	-	501,308	-	501,308	-	-
Stock issued under employee stock purchase plan	-	71,709	-	409,413	-	409,413	-	-
Stock based compensation	-	332,500	-	-	4,137,202 (c)	4,137,202	-	-
Change in unrealized loss on marketable securities	-	-	-	-	-	-	(482,391)	-
	-	500,169	-	910,721	4,137,202	5,047,923	(482,391)	(46,738,827)
<b>2005</b>								
Net Loss	-	-	-	-	-	-	-	(51,743,462)
Public offering, net	-	12,000,000	-	70,580,736	-	70,580,736	-	-
Stock option exercises	-	82,082	-	516,686	-	516,686	-	-
Stock issued under employee stock purchase plan	-	78,702	-	374,149	-	374,149	-	-
Stock based compensation	-	323,586	-	-	2,888,685 (c)	2,888,685	-	-
Unrealized gain on available-for-sale securities	-	-	-	-	-	-	225,271	-
	-	12,484,370	-	71,471,571	2,888,685	74,360,256	225,271	(51,743,462)

F-39

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	No. of Preferred Shares	No. of Common Shares	No. of Treasury Shares	Cash Contribution	Noncash Contribution	Total Capital Contribution	Accumulated Other Comprehensive Income (Loss)	Deficit Accumulated During the Development Stage
<b>2006</b>								
Net Loss	-	-	-	-	-	-	-	(50,309,587)
Stock offering (Issued at 5.50 per share net of purchase cost)	395,000	11,240	-	214,442,129 (h)	-	214,442,129	-	-
Stock option exercises	-	7,958	-	31,351	-	31,351	-	-
Stock issued under employee stock purchase plan	-	100,669	-	364,668	-	364,668	-	-
Stock based compensation	-	839,800	-	-	4,858,100 (c)	4,858,100	-	-
Unrealized gain on available-for-sale securities	-	-	-	-	-	-	186,640	-
	395,000	959,667	-	214,838,148	4,858,100	219,696,248	186,640	(50,309,587)
<b>2007</b>								
Net Loss	-	-	-	-	-	-	-	(60,570,816)
Stock option exercises (Issued at average cost of 1.00 per share)	-	151,237	-	151,237	-	151,237	-	-
Stock issued under employee stock purchase plan	-	65,515	-	205,808	-	205,808	-	-
Stock based compensation	-	871,255	-	-	5,299,300 (c)	5,299,300	-	-
Unrealized gain on available-for-sale	-	-	-	-	-	-	141,897	-

Edgar Filing: PLUG POWER INC - Form 10-K

securities

Foreign currency

translation gain	-	-	-	-	-	-	7,739,141	-
Warrants issued	-	-	-	-	1,405,715 (i)	1,405,715	-	-
	-	1,088,007	-	357,045	6,705,015	7,062,060	7,881,038	(60,570,816)

**2008**

Net Loss

Stock option

exercises (Issued

at average cost of

1.00 per share)

Stock issued

under employee

stock purchase

plan

Stock based

compensation

Conversion of

preferred stock

Unrealized gain

on

available-for-sale

securities

Foreign currency

translation loss

Treasury stock

	-	-	-	-	-	-	-	(121,700,024)
	-	3,935	-	3,935	-	3,935	-	-
	-	111,402	-	307,579	-	307,579	-	-
	-	665,744	-	6,658	7,258,897 (c)	7,265,555	-	-
	(395,000) (j)	39,500,000	-	-	-	-	-	-
	-	-	-	-	-	-	155,688	-
	-	-	-	-	-	-	(8,325,499)	-
	-	-	402,114	-	-	-	-	-
	(395,000)	40,281,081	402,114	318,172	7,258,897	7,577,069	(8,169,811)	(121,700,024)

F-40

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>No. of Preferred Shares</b>	<b>No. of Common Shares</b>	<b>No. of Treasury Shares</b>	<b>Cash Contribution</b>	<b>Noncash Contribution</b>	<b>Total Capital Contribution</b>	<b>Accumulated Other Comprehensive Income (Loss)</b>	<b>Deficit Accumulated During the Development Stage</b>
<b>2009</b>								
Net Loss	-	-	-	-	-	-	-	(40,708,552)
Stock based compensation	-	2,218,993	-	-	2,287,048 (c)	2,287,048	-	-
Stock issued under employee stock purchase plan	-	208,240	-	76,493	121,598	198,091		
Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains	-	-	-	-	-	-	(131,308)	-
Foreign currency translation gain	-	-	-	-	-	-	1,293,770	-
Treasury stock	-	-	584,085	-	-	-	-	-
	-	2,427,233	584,085	\$76,493	\$2,408,646	\$2,485,139	\$1,162,462	\$(40,708,552)

Total as of								
December 31,				\$	\$		\$	\$
2009	-	130,591,236	986,199	\$ 636,406,686	132,707,799	769,114,485	\$ 803,209	(680,370,937)

- a. Since inception, Mechanical Technology Incorporated has contributed in-process research and development of \$4,042,640; certain net assets at inception of \$707,360; \$2,000,000 of deferred rent related to a below market lease for office and manufacturing facilities; \$500,000 of in-kind services; land and buildings valued at approximately \$4,697,782; and research contracts valued at approximately \$2,250,000.
- b. In February 1999, the Company issued 2,250,000 shares of common stock to GE MicroGen, Inc. in exchange for a 25% interest in GE Fuel Cell Systems, LLC. The fair value of the shares issued of \$11,250,000 was recorded under the balance sheet caption Investment in affiliates .
- c. These issuances primarily represent stock based compensation issued to employees, consultants and others for services performed. These amounts are recorded at the fair value of the issuance on the grant date.
- d. Represents the fair value of shares issued to Engelhard Corporation for the development and supply of advanced catalysts as part of a development agreement.
- e. Represents the fair value of shares issued for ownership interest in Advanced Energy Incorporated.
- f. Represents the fair value of an option to purchase 725,000 shares of the Company s common stock issued to GE Power Systems Equities, Inc. as part of the amendment to the GE Fuel Cell Systems LLC distribution agreement.
- g. Represents the fair value of shares issued related to the acquisition of H Power.
- h. On June 29, 2006, Smart Hydrogen, Inc. purchased 395,000 shares of Class B Capital Stock, a class of preferred stock, along with the 11,240 shares of common stock.
- i. On May 4, 2007, the shareholders of General Hydrogen received warrants to purchase up to 571,429 shares of Plug Power Common Stock.
- j. On December 20, 2008 the 395,000 shares of Class B capital stock was converted into 39,500,000 shares of common stock.

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**14. Employee Benefit Plans**

***1999 Employee Stock Purchase Plan***

In 1999, the Company adopted the 1999 Employee Stock Purchase Plan (the Plan) under which employees are eligible to purchase shares of the Company's common stock at a discount through periodic payroll deductions. The Plan is intended to meet the requirements of Section 423 of the Internal Revenue Code. Purchases occur at the end of six month offering periods at a purchase price equal to 85% of the market value of the Company's common stock at either the beginning of the offering period or the end of the offering period, whichever is lower. Participants may elect to have up to 10% of their pay withheld for purchase of common stock at the end of the offering period, up to a maximum of \$12,500 within any offering period. The Company has reserved 1,000,000 shares of common stock for issuance under the Plan. The Company issued 208,240, 111,402 and 65,515 shares of stock under the Plan during 2009, 2008, and 2007, respectively.

Under FASB ASC No. 718, Compensation - Stock Compensation, the 15% discount and the look-back feature are considered compensatory items for which expense must be recognized. The Company values Plan shares as a combination position consisting of 15% of a share of nonvested stock and 85% of a six-month stock option. The value of the nonvested stock is estimated based on the trading value of the Company's common stock at the beginning of the offering period, and an expected life of six months. The resulting per-share value is multiplied by the shares estimated to be purchased during the offering period based on historical experience to arrive at a total estimated compensation cost for the offering period. The estimated compensation cost is recognized on a straight-line basis over the offering period.

Effective July 1, 2009, the Company suspended this plan. Factors taken into consideration were the expense of administering the plan, participation rate and the introduction of the Company-wide stock option grant as an alternative means of promoting employee stock ownership.

**Stock Option Plans (the Option Plans)**

***1997 Stock Option Plan***

Effective July 1, 1997, the Company established a stock option plan to provide employees, consultants, and members of the Board of Directors the ability to acquire an ownership interest in the Company (1997 Stock Option Plan).

Options for employees issued under this plan generally vested 20% per year and expire ten years after issuance. Options granted to members of the Board generally vested 50% upon grant and 25% per year thereafter. Options granted to consultants generally vested one-third on the expiration of the consultant's initial contract term, with an additional one-third vesting on each of the next two anniversaries thereafter. At December 31, 2009, there were 1,800 options outstanding and vested under this plan. Although no further options will be granted under this plan, the options previously granted will be exercisable for shares of common stock until their expiration dates are reached.

***1999 Stock Option and Incentive Plan***

Effective August 16, 1999, the Company established a stock option plan to encourage and enable the officers, employees, independent directors and other key persons (including consultants) of the Company and its subsidiaries upon whose judgment, initiative and efforts the Company largely depends for the successful conduct of its business to acquire a proprietary interest in the Company (1999 Stock Option Plan).

F-42

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

At December 31, 2009 there were approximately 6.0 million options granted and outstanding and 2.4 million options available to be issued under the 1999 Stock Option Plan. The number of shares of common stock available for issuance under the Plan will increase by the amount of any forfeitures under the 1999 Stock Option Plan and under the 1997 Stock Option Plan. The number of shares of common stock under the 1999 Stock Option Plan will further increase January 1 and July 1 of each year by an amount equal to 16.4% of any net increase in the total number of common shares of stock outstanding. The 1999 Stock Option Plan permits the Company to: grant incentive stock options; grant non-qualified stock options; grant stock appreciation rights; issue or sell common stock with vesting or other restrictions, or without restrictions; grant rights to receive common stock in the future with or without vesting; grant common stock upon the attainment of specified performance goals; and grant dividend rights in respect of common stock. Options for employees issued under this plan generally vest in equal annual installments over periods of three or four years and expire ten years after issuance. Options granted to members of the Board generally vest one year after issuance. Options granted to consultants generally vested one-third on the expiration of the consultant's initial contract term, with an additional one-third vesting on each of the next two anniversaries thereafter. To date, options granted under the 1999 Stock Option Plan have vesting provisions ranging from immediate vesting to five years in duration and expire ten years after issuance.

Compensation cost associated with employee stock options represented approximately \$291,000 of the total share-based payment expense recorded for the year ended December 31, 2009. The Company estimates the fair value of stock options and shares issued under the employee stock purchase plan using a Black-Scholes valuation model, and the resulting fair value is recorded as compensation cost on a straight-line basis over the option vesting period. Key inputs and assumptions used to estimate the fair value of stock options include the grant price of the award, the expected option term, volatility of the Company's stock, an appropriate risk-free rate, and the Company's dividend yield. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by employees who receive equity awards, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made by the Company. The assumptions made for purposes of estimating fair value under the Black-Scholes model for the 1,375,500, 1,114,750 and 1,317,450 options granted during the years ended December 31, 2009, 2008 and 2007, respectively were as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Dividend yield:	0%	0%	0%
Expected term of options (years):	6	6	6
Risk free interest rate:	1.79%-2.80%	2.56%-3.45%	3.77%-5.04%
Volatility:	85%-89%	61%-84%	55%-62%



The Company's estimate of an expected option term was calculated in accordance with the simplified method for calculating the expected term assumption. The estimated stock price volatility was derived based upon a blend of implied volatility and the Company's actual historic stock prices over the past six years, which represents the Company's best estimate of expected volatility.

F-43

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

A summary of stock option activity for the year December 31, 2009 is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Options outstanding at December 31, 2008	6,170,304	\$ 8.78	5.6	
Granted	1,375,500	0.92		
Exercised	-	-		
Forfeited	(1,281,590)	7.82		
Expired	(282,928)	13.11		
Options outstanding at December 31, 2009	5,981,286	\$ 6.97	5.9	\$ -
Options exercisable at December 31, 2009	4,787,897	\$ 8.48	5.0	\$ -
Options fully vested at December 31, 2009	4,787,897	\$ 8.48	5.0	\$ -

The weighted average grant date fair value of options granted during the years ended December 31, 2009, 2008 and 2007 was \$0.66, \$1.68 and \$1.92, respectively. There were no stock options exercised during the year ended December 31, 2009. As of December 31, 2009, there was approximately \$615,000 of unrecognized compensation cost related to stock option awards to be recognized over the next three years. The total fair value of stock options that vested during the years ended December 31, 2009 and 2008 was approximately \$291,000 and \$3.9 million, respectively.

F-44

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

Restricted stock awards vest in equal installments over a period of one to four years. Restricted stock awards were valued based on the closing price of the Company's common stock on the date of grant, and compensation cost is recorded on a straight-line basis over the share vesting period. The Company recorded expense of approximately \$964,000 associated with its restricted stock awards in 2009. As of December 31, 2009, there was \$7.3 million of unrecognized compensation cost related to restricted stock awards to be recognized over the next three years.

A summary of restricted stock activity for the year ended December 31, 2009 is as follows:

	<b>Shares</b>	<b>Aggregate Intrinsic Value</b>
Unvested restricted stock at December 31, 2008		\$
Granted (a)	10,194,459	8,664,018
Forfeited (a)	(82,840 )	(69,586 )
Vested	(1,428,953 )	(1,299,943 )
Unvested restricted stock at December 31, 2009	8,682,666	\$ 7,294,489

(a) Pursuant to the Long Term Incentive Plan discussed below, the Company granted 8,667,666 restricted stock units, net of forfeitures, to a select group of critical employees as of December 31, 2009. If certain metrics are reached during each of the three years of the grant period commencing on January 1, 2010, the

Company could issue these shares.

For the years ended December 31, 2009, 2008, and 2007, the Company recorded expense of approximately \$1.9 million, \$8.6 million, and \$5.4 million respectively, in connection with its share based payment awards.

***401(k) Savings & Retirement Plan***

The Company offers a 401(k) Savings & Retirement Plan to eligible employees meeting certain age and service requirements. This plan permits participants to contribute 100% of their salary, up to the maximum allowable by the Internal Revenue Service regulations. Participants are immediately vested in their voluntary contributions plus actual earnings or less actual losses thereon. Participants are vested in the Company's matching contribution based on years of service completed. Participants are fully vested upon completion of three years of service. During 2002, the Company began funding its matching contribution in common stock. Accordingly, the Company has issued 607,553, 379,189 and 279,054 shares of common stock to the Plug Power Inc. 401(k) Savings & Retirement Plan during 2009, 2008 and 2007, respectively.

The Company's expense for this plan, including the issuance of shares, was approximately \$534,000, \$835,000 and \$962,000 for years ended December 31, 2009, 2008 and 2007, respectively.

F-45

---

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

#### ***Long Term Incentive Plan***

On October 28, 2009, the Compensation Committee recommended and the Board of Directors approved a Long Term Incentive (LTI) Plan pursuant to the terms of the Company's 1999 Stock Option and Incentive Plan. Designed as an incentive vehicle to support employee efforts, the LTI Plan seeks to increase shareholder value by encouraging Plug Power employees to continue to work diligently to further the Company's long term goals, particularly the recently announced three year plan to achieve profitability in 2012.

Under the LTI Plan, a select group of critical employees received a Restricted Stock Unit Award Agreement (Agreement) awarding a one time grant of restricted stock units (RSUs) calculated using a multiple of the selected employee's base salary. According to the Agreement, the restrictions on each participant's RSU allocation will lapse over a three year period upon successful completion of weighted performance-based metrics. Specifically, restrictions on 25% of RSUs are tied to the Company's achievement of revenue targets, while the restrictions on 75% of RSUs are tied to the Company's achievement of earnings before interest expense, taxes, depreciation, amortization and non-cash charges for equity compensation (measurement referred to in the Agreement as "EBITDAS") targets. Intended to supplement the annual employee incentive plan payout, the total number of RSUs lapsing each year will vary depending on the Company's progress achieving the corresponding threshold, target or stretch goals.

Pursuant to the terms of the Agreement, in the event stretch revenue and EBITDAS metrics are reached during each of the three years of the grant period commencing on January 1, 2010, the Company could issue a maximum of 8,667,666 shares to LTI Plan participants, currently representing approximately 6.6% of total outstanding shares. Restrictions on these shares only lapse in the event the Company performs at the articulated performance metrics.

#### **15. Other Related Party Transactions**

Pursuant to the Second Amendment to the Amended and Restated Distribution Agreement dated May 13, 2005, the Company currently has a non-exclusive distribution agreement with DTE Energy Technologies, Inc. (DTE), an affiliate of Edison Development Company and DTE Energy Corporation, for the states of Michigan, Ohio, Illinois, and Indiana. According to the most recent amendments to the agreement, the Company may sell directly or negotiate

non-exclusive distribution rights with third parties for the GenCore, GenSite and GenSys2T products in these four states. For every product sold directly by the Company or by a third party within Michigan, Ohio, Illinois and Indiana the Company has agreed to pay a 5% commission to DTE based on sales price of units shipped to the above noted states. The distribution agreement expires on December 31, 2014.

As of December 31, 2009 and 2008, the Company had no payables due to DTE under this commission provision and no outstanding receivables from DTE.

F-46

---

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

#### **16. Fair Value of Financial Instruments**

The following disclosure of the estimated fair value of financial instruments is made in accordance with the provision of ASC No. 825-10-65, Financial Instruments – Transition and Open Effective Date Information (ASC 825-10-65). ASC 825-10-65 requires disclosures about fair value of financial instruments in interim financial statements as well as in annual financial statements. Although the estimated fair value amounts have been determined by the Company using available market information and appropriate valuation methodologies, the estimates presented are not necessarily indicative of the amounts that the Company could realize in current market exchanges.

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

*Cash and cash equivalents, accounts receivable, accrued interest receivable and payable, notes receivable and borrowings under line of credit:* The carrying amounts reported in the consolidated balance sheets approximate fair value because of the short maturities of these instruments.

*Long term debt:* The carrying amount reported in the consolidated balance sheets approximates fair value as the debt was negotiated at market rates during the first quarter 2009 and there have not been any significant changes since that time.

#### **17. Supplemental Disclosures of Cash Flows Information**

The following represents required supplemental disclosures of cash flows information and non-cash financing and investing activities which occurred during the years ended December 31, 2009, 2008 and 2007:



Edgar Filing: PLUG POWER INC - Form 10-K

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Stock-based compensation accrual impact	\$ 480,145	\$ (1,341,324)	\$ (247,054 )
Change in unrealized loss/gain on available-for-sale securities	(131,308 )	155,688	141,897
Estimated fair value of net assets acquired and liabilities assumed			58,512,893
Decrease to broker for security purchase			(5,000,000 )
Restricted shares forfeited		(124,945 )	
Transfer to trading securities    auction rate debt securities		52,650,654	
Cash paid for interest	999,665		

F-47

---

**Table of Contents**

**PLUG POWER INC. AND SUBSIDIARIES**

**(A DEVELOPMENT STAGE ENTERPRISE)**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**18. Commitments and Contingencies**

*Alliances and development agreements*

*BASF:* In 2006, BASF SE, a German Societas Europaea (SE) corporation, acquired Engelhard, with whom we have a Development Agreement and a Supply Agreement. With its acquisition, BASF inherited Engelhard's obligations to the Company under both of these agreements. The Development Agreement, dated April 5, 2004, is for the development of advanced catalysts to increase the overall performance and efficiency of the Company's fuel processor and will expire on December 31, 2010. The Supply Agreement, also dated April 5, 2004, is a requirements contract whereby the Company agrees to buy from BASF and BASF agrees to sell to the Company, 100% of the Company's requirements for catalyst materials, as developed under the Development Agreement, the price to be determined January 1<sup>st</sup> of each year by BASF, until the agreement's expiration date of December 31, 2010.

*General Electric Company (GE) Entities:* On February 27, 2006, the Company, GE MicroGen, Inc., and GE restructured their service and equity relationships by terminating the joint venture and the associated distributor and other agreements, and entering into a new development collaboration agreement. Under this agreement, the Company and GE (through its Global Research unit) agreed to collaborate on programs including, but not limited to, development of tools, materials and components that can be applied to various types of fuel cell products. The Company and GE mutually agreed to extend the terms of the development collaboration agreement such that the Company is obligated to purchase \$1 million of services from GE in connection with this collaboration prior to December 31, 2009. As of December 31,

2009, the approximately \$363,000 obligation remaining under the extended development collaboration agreement became due and payable; however, the Company and GE d/b/a GE Global Research entered into a Lease Agreement dated October 6, 2009 for space in the Company's Latham, New York facility whereby the parties mutually agreed that pursuant to section 4 of the Lease Agreement the amount owed by the Company to GE under the development collaboration agreement would be offset by the rent owed by GE to the Company each month. The development collaboration agreement is scheduled to terminate on the earlier of (i) December 31, 2014 or (ii) upon the completion of a certain level of program activity.

*NYSERDA*: The Company has an obligation to repay the New York State Environmental Research and Development Authority (NYSERDA) according to royalty payment provisions in each of the Company's past and present NYSERDA agreements. For sales made by a New York State manufacturer, the Company must pay a royalty to NYSERDA at a rate of 0.5% of net sales of products developed under the NYSERDA programs; or, for a non-new York State manufacturer, the Company must pay a royalty to NYSERDA at a rate of 3% of net sales. The royalty payments are currently calculated at 0.5% of net sales of our GenCore and GenSys products because we are a New York State manufacturer and both of these products were developed using some percentage of NYSERDA monies. The Company's maximum liability under the NYSERDA royalty provisions is one times the aggregate total amount of monies received from NYSERDA. If the total amount received from NYSERDA under an individual agreement is not paid back in royalties to NYSERDA within fifteen (15) years from the date of that individual agreement, then that amount is deducted from the aggregate total amount due under the royalty provisions. As of December 31, 2009 and 2008, approximately \$2,000 and \$15,000, respectively, have been recorded as accrued expenses in the consolidated balance sheets related to the royalty provisions.

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)*****Leases***

As of December 31, 2009 and 2008, the Company has no capital leases outstanding. The Company has several noncancelable operating leases, primarily for warehouse facilities and office space that expire over the next five years. Portions of certain properties are subleased for periods expiring in various years through 2011.

Future minimum lease payments under noncancelable operating leases (with initial or remaining lease terms in excess of one year) as of December 31, 2009 are:

<b>Year ending December 31</b>	<b>Operating leases</b>
2010	\$ 1,209,056
2011	987,198
2012	279,600
2013	279,600
2014 and thereafter	1,467,900
Total future minimum lease payments	\$ 4,223,354

Minimum future rental income receivable under subleases from non-cancelable operating leases were \$437,028 and \$0 as of December 31, 2009 and 2008, respectively.

Rental expense for all operating leases for the years ended December 31, 2009, 2008 and 2007 were as follows:

	<b>2009</b>	<b>2008</b>	<b>2007</b>
Minimum rentals	\$ 1,819,000	\$ 1,909,000	\$ 1,600,000
Sublease rental income	(5,000 )		
Total	\$ 1,814,000	\$ 1,909,000	\$ 1,600,000

F-49

---

## **Table of Contents**

### **PLUG POWER INC. AND SUBSIDIARIES**

#### **(A DEVELOPMENT STAGE ENTERPRISE)**

#### **NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

##### ***Concentrations of credit risk***

Concentrations of credit risk with respect to receivables exist due to the limited number of select customers that the Company has initial commercial sales arrangements with and government agencies. To mitigate credit risk, the Company performs appropriate evaluation of a prospective customer's financial condition.

At December 31, 2009, five customers comprise approximately 67.7% of the total accounts receivable balance, with each customer individually representing 43.8%, 7.0%, 6.7%, 6.2% and 4.0% of total accounts receivable, respectively. At December 31, 2008, five customers comprise approximately 62.0% of the total accounts receivable balance, with each customer individually representing 22.3%, 11.7%, 10.6%, 10.1% and 7.3% of total accounts receivable, respectively.

At December 31, 2009, contracts with the federal government accounted for approximately \$5.6 million or 45.6% of total revenue. At December 31, 2008, contracts with the federal government accounted for approximately \$8.3 million or 46.6% of total revenue, contracts with the state government accounted for \$1.9 million or 10.7% and one other customer accounted for \$1.9 million or 10.7% of total revenue.

The Company has cash deposits in excess of federally insured limits. The amount of such deposits is essentially all cash at December 31, 2009.

##### ***Employment Agreements***

The Company is party to employment agreements with certain executives which provide for compensation and certain other benefits. The agreements also provide for severance payments under certain circumstances.

##### ***Early Commercial Purchase Agreement***

On October 15, 2007, the Company and Wal-Mart Stores East, LP (Wal-Mart) signed an Early Commercial Purchase Agreement for GenDrive units. Under this agreement, the Company has certain commitments to provide for the maintenance/service of the units sold as well as supply of hydrogen to Wal-Mart for up to seven years from the date of commissioning. The Company also provides certain indemnifications related to this agreement to Wal-Mart. As of September 30, 2008, all units sold to Wal-Mart have been placed in service.

***Hydrogen Payment Agreement***

Pursuant to the agreement negotiated between Air Products and the Company to supply hydrogen infrastructure and hydrogen to Central Grocers at their distribution center, the Company has an obligation to purchase hydrogen from and pay a monthly service charge of \$23,300 for hydrogen infrastructure to Air Products for the full term of the contract.

F-50

---

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)****19. Geographic Information**

During 2009, the Company formed our Indian organization, Plug Power Energy India Private Limited (Plug Power India), an affiliate of Plug Power Inc. to provide support and service to our GenSys product.

The following is a summary of revenue for the years ended December 31, 2009, 2008 and 2007, based on physical location of the subsidiary making the sale:

	<b>2009</b>	<b>2009</b>	<b>2008</b>	<b>2008</b>	<b>2007</b>	<b>2007</b>
	<b>Product and service revenue</b>	<b>Research and development contract revenue</b>	<b>Product and service revenue</b>	<b>Research and development contract revenue</b>	<b>Product and service revenue</b>	<b>Research and development contract revenue</b>
United States	\$ 4,683,627	\$ 7,269,404	\$ 4,442,432	\$ 10,779,553	\$ 2,792,923	\$ 11,982,095
Canada	149,146	190,379	224,863	2,454,469	289,033	1,206,572
Total	\$4,832,773	\$7,459,783	\$4,667,295	\$13,234,022	\$3,081,956	\$13,188,667

Long-lived assets, representing the sum of net book value of property, plant, and equipment plus intangible assets, goodwill and other assets, based on physical location as of December 31, 2009 and 2008, are as follows:

	<b>2009</b>	<b>2008</b>
United States	\$ 18,572,109	\$ 20,871,248
India	14,222	-



Canada		9,834,011		9,911,038
Total	\$	28,420,342	\$	30,782,286

**20. Unaudited Quarterly Financial Data (in thousands, except per share data)**

	<b>Quarters Ended</b>			
	<b>March 31, 2009</b>	<b>June 30, 2009</b>	<b>September 30, 2009</b>	<b>December 31, 2009</b>
Product and service revenue	\$ 1,283	\$ 1,285	\$ 1,045	\$ 1,220
Contract revenue	1,339	1,937	1,497	2,687
Net loss	(8,157 )	(10,250 )	(10,171 )	(12,131 )
Loss per share:				
Basic and diluted	(0.06 )	(0.08 )	(0.08 )	(0.09 )

F-51

**Table of Contents****PLUG POWER INC. AND SUBSIDIARIES****(A DEVELOPMENT STAGE ENTERPRISE)****NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

	<b>Quarters Ended</b>			
	<b>March 31, 2008</b>	<b>June 30, 2008</b>	<b>September 30, 2008</b>	<b>December 31, 2008</b>
Product and service revenue	\$ 850	\$ 1,130	\$ 1,271	\$ 1,416
Contract revenue	2,887	3,702	2,783	3,862
Net loss	(20,728 )	(22,867 )	(13,810 )	(64,295 )
Loss per share:				
Basic and diluted	(0.24 )	(0.26 )	(0.16 )	(0.69 )

F-52

---