

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2010

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

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

Commission file number: 1-34392

**PLUG POWER INC.**

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

**Delaware**

*(State or Other Jurisdiction  
of Incorporation or Organization)*

**22-3672377**

*(I.R.S. Identification  
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:**

*Title of Each Class*

*Name of Each Exchange on Which Registered*

**Common Stock, par value \$.01 per share  
Series A Junior Participating Cumulative  
Preferred Stock, par value \$.01 per share**

**The NASDAQ Capital Market  
The NASDAQ Capital Market**

**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, 2010 was \$38,646,553.

As of March 29, 2011, 132,434,673 shares of the registrant's common stock were issued and outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

None.

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## 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,” “continue,” “estimate,” “expect,” “intend,” “may,” “should,” “will,” “would,” “plan,” “projected” or the negative of such words or other similar words or phrases. We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. Investors are cautioned not to unduly rely on forward-looking statements because they involve risks and uncertainties, and actual results may differ materially from those discussed as a result of various factors, including, but not limited to: the risk that we continue to incur losses and might never achieve or maintain profitability, the risk that the additional capital we expect we will need to raise to fund our operations beyond the first quarter of 2012 may not be available; our lack of extensive experience in manufacturing and marketing products may impact our ability to manufacture and market products on a profitable and large-scale commercial basis; the risk that unit orders will not ship, be installed and/or converted to revenue, in whole or in part; the risk that pending orders may not convert to purchase orders, in whole or in part; the risk that our continued failure to comply with NASDAQ’s listing standards may severely limit our ability to raise additional capital; the cost and timing of developing, marketing and selling our products and our ability to raise the necessary capital to fund such costs; the ability to achieve the forecasted gross margin on the sale of our products; the actual net cash used for operating expenses may exceed the projected net cash for operating expenses; the cost and availability of fuel and fueling infrastructures for our products; market acceptance of our GenDrive 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 successfully expand our product lines; our ability to improve system reliability for our GenDrive systems; competitive factors, such as price competition and competition from other traditional and alternative energy companies; our ability to protect our intellectual property; the cost of complying with current and future federal, state and international governmental regulations; and other risks and uncertainties discussed under Item 1A—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 leading provider of alternative energy technology focused on the design, development, commercialization and manufacture of fuel cell systems for the industrial off-road (forklift or material handling) market. Plug Power has also developed products for the back-up and stationary power markets worldwide. Effective April 1, 2010, the Company was no longer considered a development stage enterprise since its principal operations began to provide more than insignificant revenues as the Company received orders from repeat customers, increased its customer base and had a significant backlog. Prior to April 1, 2010, the Company was considered a development stage enterprise because substantially all of our resources and efforts were 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 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 concentrate our efforts on developing, manufacturing and selling our hydrogen-fueled PEM GenDrive® products on commercial terms for industrial off-road (forklift or material handling) applications, with a focus on multi-shift high volume manufacturing and high throughput distribution sites.

We have previously invested in development and sales activities for low-temperature remote-prime power GenSys® products and our GenCore® product, which is a hydrogen fueled PEM fuel cell system to provide back-up power for critical infrastructure. While Plug Power will continue to service and support GenSys and/or GenCore products on a limited basis, our main focus is our GenDrive product line.

The Company sells its products worldwide, with a primary focus on North America, 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 a public company 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 acquired all the issued and outstanding equity of Cellex Power Products, Inc. (Cellex) and General Hydrogen Corporation (General Hydrogen). Through these acquisitions, and our continued GenDrive product development efforts, Plug Power became the first fuel cell company to offer a complete suite of products; Class 1 - sit-down counterbalance trucks, Class 2 – stand-up reach trucks and Class 3 – rider pallet trucks. The launch of our Class 2 product occurred in January of 2010.

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

## **BUSINESS STRATEGY**

We are committed to developing effective, economical and reliable fuel cell products and services for businesses, government agencies and commercial consumers. Building on our substantial fuel cell application and product integration experience, we are focused on generating 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, and realize their sustainability objectives through clean energy alternatives.

Our strategy is to focus our resources on the material handling market with GenDrive, a superior alternative to lead-acid batteries. Our strategy also includes the following objectives: decrease product costs by leveraging the supply chain, lower manufacturing costs, improve system reliability, 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 to replace lead-acid batteries in material handling vehicles and industrial trucks for some of North America's largest distribution and manufacturing businesses. Our primary product line is GenDrive®, a hydrogen fueled PEM fuel cell system to provide power to industrial vehicles. We are focusing our efforts on material handling applications (forklifts) at multi-shift high volume manufacturing and high throughput distribution sites where our products and services provide a unique combination of productivity, flexibility and environmental benefits. Plug Power has introduced new GenDrive product offerings to augment our product suite and allow full site conversions. During the year, we experienced add-on orders from Walmart, Coca-Cola, Sysco and Central Grocers. We also received several other new orders from various companies, some of which have not been publicly announced. We expect continued sales momentum in 2011 with our key target customers.

In 2010, we repositioned the majority of our GenSys business to focus our resources on our continued success in the material handling market. In furtherance of this objective, in October 2010, the Company licensed the intellectual property relating to its stationary power products, GenCore and GenSys, to IdaTech plc on a non-exclusive basis. Plug Power maintains ownership of, and the right to use, the patents and other intellectual property licensed to IdaTech. As part of the transaction, Plug Power also sold inventory, equipment and certain other assets related to its stationary power business. Total consideration for the licensing and assets was \$5 million and was received during October 2010. The consideration is subject to reduction by a maximum of \$1 million in the event that the Company does not deliver certain of the assets sold. As of December 31, 2010, \$1.0 million is included in assets held for sale in the consolidated balance sheets.

We continue to develop and monitor future iterations of our products aligned with our evolving product roadmap. Plug Power currently has 85% market share in the fuel cell powered material handling industry and is transforming the US fuel cell manufacturing industry into a globally competitive force that will lead to the export, rather than the import, of these innovative energy products.

## 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 using 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.

## 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 2010, all of our GenDrive product installations were in North America.

We shipped 650 units and received 543 orders for our GenDrive product during the year ending December 31, 2010. Backlog on December 31, 2010 was 527 units representing approximately \$12.8 million in billable value including approximately \$700,000 related to 20 GenDrive products that were awarded under various government projects that were unfunded as of December 31, 2010. Backlog on December 31, 2009 was 654 units representing approximately \$15.6 million in billable value which includes approximately \$700,000 related to 20 GenDrive products that were awarded under various government projects that were unfunded as of December 31, 2009.

| GenDrive                    | 2010 | 2009 |
|-----------------------------|------|------|
| Product Shipments . . . . . | 552  | 131  |
| Lease Shipments . . . . .   | 98   | 140  |
| Cancellations . . . . .     | 20   | —    |
| Orders . . . . .            | 543  | 584  |
| Backlog . . . . .           | 527  | 654  |

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 generally occur between ninety (90) days and twenty-four (24) months from the date of acceptance of the order.

The assembly of GenDrive products that we sell is performed 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.

We intend to focus our efforts on developing, manufacturing and selling our GenDrive products and do not expect to develop or manufacture GenSys or GenCore products in the near term.

In 2010, to the extent of existing purchase commitments, 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 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. 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 were cancelled.

| <u>GenCore</u>          | <u>2010</u> | <u>2009</u> |
|-------------------------|-------------|-------------|
| Shipments . . . . .     | 10          | 31          |
| Cancellations . . . . . | —           | 101         |
| Orders . . . . .        | —           | 2           |
| Backlog . . . . .       | —           | 10          |

The assembly of GenCore products that we sell is performed 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.

**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, with a primary focus on North America, through our direct product sales force, original equipment manufacturers (OEMs) and their dealer networks.

At December 31, 2010, contracts with two customers and one federal government agency each accounted for 10% or more of total consolidated revenues.

**COMPETITION**

We are confronted by aggressive competition in all areas of our business. The markets we address for motive power are characterized by the presence of well-established 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, including size and weight, 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.

**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, are 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 2010, the U.S. Patent and Trademark Office issued one new patent to the Company and we currently have a total of 150 issued patents. We also have 21 U.S. patent applications pending. The number of pending patent applications decreased in 2010 as we continued our efforts to focus our intellectual property protection on our current product offerings. Additionally, we have seven trademarks registered with the U.S. Patent and Trademark Office.

Furthermore, as of December 31, 2010 there were 26 pending U.S. patent applications filed on behalf of Honda and one U.S. patent issued to Honda relating to joint development work on the Home Energy Station (HES) and to which we have certain rights.

In October 2010, the Company licensed the intellectual property relating to its stationary power products, GenCore and GenSys, to IdeaTech plc on a non-exclusive basis. Plug Power maintains ownership of, and the right to use, the patents and other intellectual property licensed to IdeaTech. As part of the transaction, Plug Power also sold inventory, equipment and certain other assets related to its stationary power business. Total consideration for the licensing and assets was \$5 million and was received during October 2010. The consideration is subject to reduction by a maximum of \$1 million in the event that the Company does not deliver certain of the assets sold. As of December 31, 2010, \$1.0 million is included in assets held for sale in the consolidated balance sheets.

## **GOVERNMENT REGULATION**

We believe that we will not 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. When in production, our GenCore product was certified by independent third-parties such as the Canadian Standards Association (CSA International) to be in compliance with such ANSI standards. Additionally, the F2 and F3 GenDrive products are designed with the intent of meeting the requirements of UL 2267 “Fuel Cell Power Systems for Installation in Industrial Electric Trucks” and NFPA 505 “Fire Safety Standard for Powered Industrial Trucks.” The hydrogen tanks used in these systems have been either certified to ANSI/CSA NGV2-2007 or designed to meet ISO/TS 15869 “Gaseous hydrogen and hydrogen blends-Land vehicle fuel tanks.” We will continue to design our GenDrive products to meet ANSI and/or other standards in 2011. 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 2010, Plug Power signed a supply agreement with Ballard Power Systems (Ballard) which continues through December 31, 2014. Under this agreement, Ballard serves as the exclusive supplier of fuel cell stacks for Plug Power’s GenDrive product line for North America.

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, Air Squared, Inc. (Air Squared) and Citic GuoAn Mengguli Power Science & Technology Co. Ltd. (MGL). 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.

## **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 \$12.9 million, \$16.3 million and \$35.0 million in 2010, 2009 and 2008, respectively. We also had cost of research and development contract revenue of \$6.4 million, \$12.4 million and \$21.5 million in 2010, 2009 and 2008, 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, 2010, we had 149 employees, which includes 133 full time 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 100 F Street, N.E., 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 risk factors should be considered carefully in addition to the other information in this Annual Report on Form 10-K. The occurrence of any of the following material risks could harm our business and future results of operations and could result in the trading price of our common stock declining and a partial or complete loss of your investment. These risks are not the only ones that we face. Additional risks not presently known to us or that we currently consider immaterial may also impair our business operations and trading price of our common stock. Except as mentioned under "Quantitative and Qualitative Disclosure About Market Risk" and except for the historical information contained herein, the discussion contained in this Annual Report on 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. Please refer to the section entitled "Forward-Looking Statements."



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

We have not achieved profitability in any quarter since our formation and we will continue to incur net losses until we can produce sufficient revenue to cover our costs. Our net losses were approximately \$50.3 million in 2006, \$60.6 million in 2007, \$121.7 million in 2008, \$40.7 million in 2009 and \$47.0 million in 2010. As of December 31, 2010, we had an accumulated deficit of \$727.3 million. 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. Substantially all of our losses resulted from costs incurred in connection with our operating expenses, research and development expenses and from general and administrative costs associated with our operations. 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: 1) continue to shorten the cycles in our product roadmap with respect to: (a) product reliability and performance that our customers expect and (b) successful introduction of our products into the market, 2) accurately evaluate our markets for, and react to, competitive threats in both other technologies (such as advanced batteries) and our technology field, and 3) 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, and, even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

**We expect we will need to raise additional capital to fund our operations beyond the first quarter of 2012 and such capital may not be available to us, in which case we may need to reduce and/or cease our operations.**

Since inception, we have funded our operations primarily through private and public offerings of our common and preferred stock, borrowings under our line of credit and maturities and sales of our available-for-sale securities. Because we may not have adequate capital to fund our operations beyond the first quarter of 2012, during 2011 we expect we will need to raise additional funds for our operations through equity or debt financings, strategic alliances or otherwise. Our future liquidity and capital requirements will depend upon numerous factors, including the following: the timing and quantity of product orders and shipments, the extent to which we can effectuate the May 2010 restructuring plan; the timing and amount of our operating expenses; the timing and costs of working capital needs; the timing and costs of building a sales base; the timing and costs of developing marketing and distribution channels; the timing and costs of product service requirements; the timing and costs of hiring and training product staff; the extent to which our products gain market acceptance; the timing and costs of product development and introductions; the extent of our ongoing and any new research and development programs; and changes in our strategy or our planned activities. If we are unable to obtain additional capital prior to the end of 2011, we may not be able to sustain our future operations and may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. We cannot assure you that any necessary additional financing will be available on terms favorable to us, or at all. Given the difficult current economic environment, we believe that it could be difficult to raise additional funds and there can be no assurance as to the availability of additional financing or the terms upon which additional financing may be available. In recent years and months, the stock market in general, and the NASDAQ Capital Market and the market for smaller capitalized companies in particular, have experienced significant price and volume fluctuations that may have been unrelated or disproportionate to the operating performance of the listed companies. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us. If adequate funds are not available prior to the end of 2011, we may be required to reduce, delay and/or cease our operations and/or seek bankruptcy protection. Additionally, even if we raise sufficient capital through equity or debt financing, strategic alliances or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow.

**We do not have extensive experience in manufacturing and marketing our products and, as a result, may be unable to sustain a profitable commercial market for our new and existing products.**

From 1997 to 2008, we have focused primarily on research and development of fuel cell systems. In the latter half of 2008, Plug Power shifted to focus the viable commercialization of our fuel cell products. In 2000, we completed construction of our 50,000 square foot manufacturing facility and have continued to develop our manufacturing capabilities and processes. While we have been manufacturing our products in small quantities for several years, we do not have extensive experience in mass-manufacturing and marketing our products. 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 profitably market our products. 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. Before investing in our common stock, you should consider the challenges, expenses and difficulties that we will face as an emerging technology company seeking to sustain a viable commercial market for our new and existing products. If we are unable to sustain a viable commercial market for our products, that failure 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; and our pending orders may not convert to purchase orders, in whole or in part, which may have a material adverse effect on our revenue and cash flow.**

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 generally occurred between ninety (90) days and twenty-four (24) months from the date of acceptance of the order. Orders received during the year ended December 31, 2010 totaled 543 units. Backlog on December 31, 2010 was 527 units. Of the unit orders in backlog on December 31, 2010, orders for 144 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. There may also be product redesign or modification requirements that must be satisfied prior to shipment of units under certain of our agreements. If the redesigns or modifications are not completed, some or all of our orders may not ship or convert to revenue. We also have publicly discussed anticipated, pending orders 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.

**A continued failure to comply with NASDAQ's listing standards could result in the delisting of our common stock from the NASDAQ Capital Market and severely limit the ability to trade our common stock and to raise additional capital.**

As a result of a failure to comply with NASDAQ's \$1.00 minimum bid price requirement, effective as of June 7, 2010, our common stock listing was transferred to the NASDAQ Capital Market from the NASDAQ Global Market. The Company was given 180 calendar days, or until December 6, 2010, to regain compliance with the minimum bid price requirement, but failed to do so. On December 7, 2010, the NASDAQ Listing Qualifications Panel stayed a delisting action pending the Company's request for a hearing before the NASDAQ Hearing Panel on January 20, 2011. After the hearing, on February 1, 2011, the NASDAQ Hearing Panel granted Plug Power a final extension, until June 30, 2011, to evidence a closing bid price of \$1.00 or more for a minimum of ten consecutive business days. If Plug Power does not regain compliance with the minimum bid price requirement by June 6, 2011, the Hearing Panel will issue a final determination to delist the Company's shares and suspend trading of the Company's shares on the NASDAQ market.

effective on the second business day from the date of the final determination. If our common stock is delisted and we are unable to list on another exchange, the ability to trade and effectuate public offerings in our common stock would be severely, if not completely, limited.

**Our stock price has been and could remain volatile, which could adversely affect the price of our stock, our ability to raise additional capital and/or cause us to be subject to securities class action litigation.**

The market price of our common stock has historically experienced and may continue to experience significant volatility. In 2010, the market price of our common stock fluctuated from a high of \$0.74 per share in the first quarter of 2010 to a low of \$0.36 per share in the second quarter of 2010. 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. Such market price volatility could adversely affect our ability to raise additional capital. 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.

**The loss of one or more of our key supply partners could have a material adverse effect on our business.**

We have certain key suppliers, such as Ballard, Air Squared and MGL, that we rely on for critical components in our products and there are numerous other components for our products that are sole sourced. 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.

**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 owns approximately 33.7% of the outstanding shares of our common stock. As a result, OGK-3 can significantly influence or control certain matters requiring approval by our stockholders, including the approval of mergers or other extraordinary transactions. The interests of OGK-3 may differ from the interest of the Company and its other stockholders, and OGK-3 may vote in a way which may be adverse to the interests of the Company and its other stockholders. This concentration of ownership may have the effect of delaying, preventing or deterring key transactions such as 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.

**The sale by OGK-3 of a substantial number of shares of the Company's common stock could cause the market price of our common stock to decline and adversely affect our ability to remain listed on an exchange and/or raise capital through equity offerings.**

OGK-3 holds 44,626,939 shares of common stock as of March 29, 2011, which represent in the aggregate approximately 33.7% of the Company's outstanding common stock. In 2010, OGK-3 announced an intention to sell some or all of its Plug Power Inc. 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 overhang caused by OGK-3's announced plan to 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 continue to remain listed on the NASDAQ Capital Market and raise capital through the issuance of additional shares of our common stock or other equity securities.

**The dependency of our GenDrive product on hydrogen and our lack of control over or limited availability of such fuel may adversely impact our sales and product deployment.**

Our products depend largely on the availability of natural gas and hydrogen gas. We are dependant upon hydrogen suppliers for success with the profitable 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 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. If hydrogen suppliers elect not to participate in the material handling market, there may be an insufficient supply of hydrogen for this market that could negatively affect our sales and deployment of our GenDrive product.

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

We believe we have identified viable markets for our GenDrive products, however our products represent emerging technologies, 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 sizable 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 sizable 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, 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.

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

We will need to maintain and may 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 continued development and profitable commercialization of our products and the operation of our business, financial condition, results of operations and prospects.

**Unless we lower the cost of our GenDrive products and demonstrate their reliability, our product sales could be adversely affected.**

The initial capital cost of our GenDrive products is currently higher than many established competing technologies. If we are unable to develop and continue the current development of 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 GenDrive products internationally.**

We intend to market, distribute, sell and service our GenDrive 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.

**Delays in our product development could have a material impact on the profitable 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 profitable 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.

**We have not developed and produced certain products that we have agreed to sell to some of our customers, which may give such customers the right to terminate their agreements with us.**

We have not developed or produced certain products that are required by some of our sales and customer agreements. As of December 31, 2010, 78 of our backlog orders worth approximately \$2.1 million of product revenues have not been developed or produced. 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.

**We may never complete the research and development of certain commercially viable products, which may adversely affect our revenue, profitability and result in possible warranty claims.**

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 may not be able to generate sufficient revenue to become profitable. The profitable 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 profitable 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. We must complete additional research and development to fill out product portfolios and deliver enhanced functionality and reliability in order to manufacture additional 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 customer demonstrations could negatively impact demand for our products.**

We are currently conducting demonstrations with a number of our customers, and we plan to conduct additional demonstrations in the future. We may encounter problems and delays during these demonstrations 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 demonstrations 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.

**Our GenDrive products face intense competition and we may be unable to compete successfully.**

The markets for energy products are intensely competitive. Some of our competitors in the fuel cell sector and in incumbent technologies are much larger than we are and may have the manufacturing, marketing and sales capabilities to complete research, development and commercialization of profitable, commercially viable products more quickly and effectively than we can. 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.

**Alternatives to our GenDrive products 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. As of December 31, 2010, five of our customers comprised approximately 83.6% of the total accounts receivable balance, with each customer individually representing 33.7%, 33.5%, 6.7%, 6.0% and 3.6% of that amount. At December 31, 2010, contracts with two customers and one federal government agency each accounted for 10% or more of total consolidated revenues. 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 raw materials on which our products rely may not be readily available or available on a cost-effective basis.**

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.

**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 profitable 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 slows or recedes, 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.

**Our business may become subject to future government regulation, which may impact our ability to market our products and costs and price of 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. See "Business—Government Regulations" for additional information. 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 and hydrogen gas in catalytic reactions. While our products do not use this fuel in a combustion process, natural gas and hydrogen gas are flammable fuels that could leak in a home or business 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 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, the adequacy of which may not be sufficient.**

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.

### **Our government contracts could restrict our ability to profitably 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 some 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**

There are no unresolved comments regarding our periodic or current reports from the staff of the SEC that were issued 180 days or more preceding the end of our 2010 fiscal year.

### **ITEM 2. PROPERTIES**

Our principal 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 we believe that these facilities are sufficient to accommodate our anticipated production volumes for at least the next two years. We also lease a 25,000 square foot warehouse facility in Latham, New York.

In connection with the acquisitions of Cellex and General Hydrogen, we also lease one facility in Richmond, British Columbia with square footage of 33,200 square feet. The Company no longer occupies this space but has sublease agreements for the total square footage.

### **ITEM 3. LEGAL PROCEEDINGS**

In July 2008, Sorooof Trading Development Company Ltd. (Sorooof) filed a demand for arbitration against GE Fuel Cell Systems, LLC (GEFCS) claiming breach of a distributor agreement and seeking damages of \$3 million. 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, and the lawsuit is pending. 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. The Company, GEFCS, GEM and General Electric Company (GE) are party to an agreement under which the Company agreed to indemnify such parties for up to \$1 million of certain losses related to the Sorooof distributor agreement. GE has made a claim for indemnification against the Company under this agreement for all losses it may suffer as a result of the Sorooof dispute.

On September 29, 2010, Aspen Technology, Inc. filed a complaint against Plug Power Inc. in the Suffolk County, Massachusetts Superior Court, alleging that the Company breached a software license and service agreement due to nonpayment. The complaint seeks monetary damages of approximately \$745,000, which is allegedly the remaining license fee payable by the Company under the agreement, plus attorneys’ fees and interest. On January 31, 2011, Plug Power Inc. and Aspen Technology executed a confidential settlement agreement wherein Aspen Technology and Plug Power mutually released the other from all claims, debts, demands, causes of action and liabilities that were or could have been asserted in the action. The Suffolk County Superior Court formally dismissed the case with prejudice on February 4, 2011.

#### 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, 2010 and 2009, we issued 901,661 and 607,553 shares, respectively, 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 Capital Market under the symbol "PLUG." As of March 5, 2011, there were approximately 2,763 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 47,305. The following table sets forth the high and low close price per share of our common stock as reported by the NASDAQ Capital Market for the periods indicated:

|                       | Sales prices |         |
|-----------------------|--------------|---------|
|                       | High         | Low     |
| 2010                  |              |         |
| 1st Quarter . . . . . | \$ 0.74      | \$ 0.50 |
| 2nd Quarter . . . . . | \$ 0.73      | \$ 0.36 |
| 3rd Quarter . . . . . | \$ 0.50      | \$ 0.38 |
| 4th Quarter . . . . . | \$ 0.54      | \$ 0.37 |
| 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 |

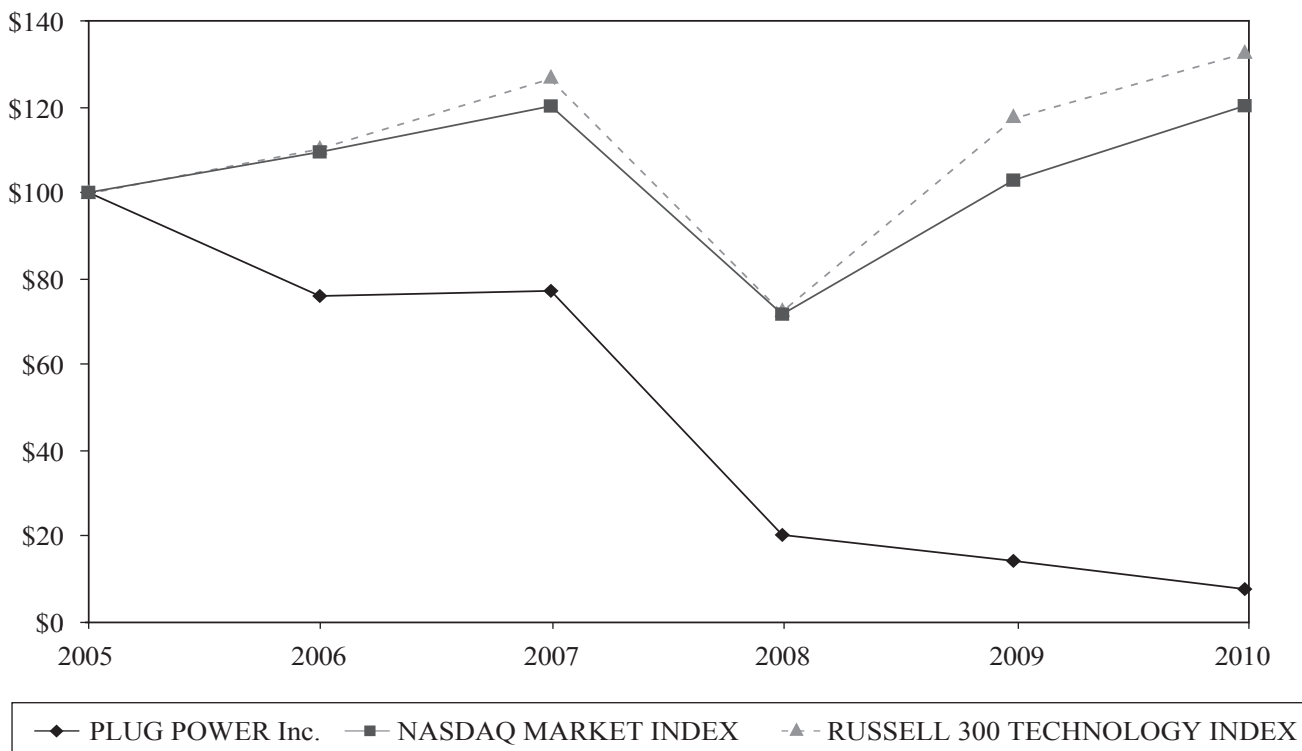
#### DIVIDEND POLICY

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.



## 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, 2005 and ending December 31, 2010. 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, 2005 and the reinvestment of all dividends.



| Index                              | 2005   | 2006   | 2007   | 2008  | 2009   | 2010   |
|------------------------------------|--------|--------|--------|-------|--------|--------|
| PLUG POWER INC. ....               | 100.00 | 75.83  | 77.00  | 19.88 | 13.84  | 7.23   |
| RUSSELL 300 TECHNOLOGY INDEX ..... | 100.00 | 110.46 | 127.03 | 72.49 | 117.86 | 132.86 |
| NASDAQ MARKET INDEX .....          | 100.00 | 109.52 | 120.27 | 71.51 | 102.89 | 120.29 |

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.

## 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 2010, 2009, 2008, 2007, and 2006 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."

|  | Years Ended December 31,              |                    |                     |                    |                    |
|--|---------------------------------------|--------------------|---------------------|--------------------|--------------------|
|  | 2010                                  | 2009               | 2008                | 2007               | 2006               |
|  | (in thousands, except per share data) |                    |                     |                    |                    |
| <b>Statements Of Operations:</b>   |                                       |                    |                     |                    |                    |
| Product and service revenue . . . . .  | \$ 15,739                             | \$ 4,833           | \$ 4,667            | \$ 3,082           | \$ 2,657           |
| Research and development contract revenue . . . .                                  | 3,598                                 | 7,460              | 13,234              | 13,189             | 5,179              |
| Licensed technology revenue . . . . .  | 136                                   | —                  | —                   | —                  | —                  |
| Total revenue . . . . .  | <u>19,473</u>                         | <u>12,293</u>      | <u>17,901</u>       | <u>16,271</u>      | <u>7,836</u>       |
| Cost of product and service revenues . . . . .                                     | 23,111                                | 7,246              | 11,442              | 9,399              | 4,833              |
| Cost of research and development contract<br>revenues . . . . .                    | 6,371                                 | 12,433             | 21,505              | 19,045             | 7,637              |
| Research and development expense . . . . .   | 12,901                                | 16,324             | 34,987              | 39,218             | 41,577             |
| Selling, general and administrative expenses . . . .                               | 25,572                                | 15,427             | 28,333              | 19,323             | 12,268             |
| Goodwill impairment charge . . . . .   | —                                     | —                  | 45,843              | —                  | —                  |
| Gain on sale of assets . . . . .   | (3,217)                               | —                  | —                   | —                  | —                  |
| Amortization of intangible assets . . . . .  | 2,264                                 | 2,132              | 2,225               | 1,614              | —                  |
| Other income (expense), net . . . . .  | 570                                   | 560                | 4,734               | 11,757             | 8,169              |
| Net loss . . . . .   | <u>\$ (46,959)</u>                    | <u>\$ (40,709)</u> | <u>\$ (121,700)</u> | <u>\$ (60,571)</u> | <u>\$ (50,310)</u> |
| Loss per share, basic and diluted . . . . .  | <u>\$ (0.36)</u>                      | <u>\$ (0.32)</u>   | <u>\$ (1.36)</u>    | <u>\$ (0.69)</u>   | <u>\$ (0.58)</u>   |
| Weighted average number of common shares<br>outstanding . . . . .                  | <u>131,232</u>                        | <u>129,111</u>     | <u>89,383</u>       | <u>87,342</u>      | <u>86,100</u>      |
| <b>Balance Sheet Data:</b>   |                                       |                    |                     |                    |                    |
| <i>(at end of the period)</i>  |                                       |                    |                     |                    |                    |
| Unrestricted cash, cash equivalents<br>and available-for-sale securities . . . . . | \$ 21,359                             | \$ 62,541          | \$ 104,688          | \$ 165,701         | \$ 269,123         |
| Trading securities – auction rate debt securities . . . .                          | —                                     | 53,397             | 52,651              | —                  | —                  |
| Total assets . . . . .   | 59,177                                | 164,185            | 209,112             | 268,392            | 307,920            |
| Borrowings under line of credit . . . . .  | —                                     | 59,375             | 62,875              | —                  | —                  |
| Current portion of long-term obligations . . . . .                                 | —                                     | 533                | 401                 | 1,384              | —                  |
| Long-term obligations . . . . .  | 1,244                                 | 2,426              | 1,313               | 4,580              | 1,112              |
| Stockholders' equity . . . . .   | 42,913                                | 88,269             | 125,864             | 248,900            | 294,528            |
| Working capital . . . . .  | 23,659                                | 60,009             | 86,171              | 163,906            | 267,002            |

## 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., or the Company, is a leading provider of alternative energy technology focused on the design, development, commercialization and manufacture of fuel cell systems for the industrial off-road (forklift or material handling) market. Plug Power has also developed products for the back-up and stationary power markets worldwide.

Effective April 1, 2010, the Company was no longer considered a development stage enterprise since principal operations began to provide more than insignificant revenues as the Company received orders from repeat customers, increased its customer base and had a significant backlog. Prior to April 1, 2010, the Company was considered a development stage enterprise because substantially all of our resources and efforts were 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. 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 commercially viable 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 market and believe we have developed reliable products for our end customers.

Plug Power has successfully introduced new GenDrive product offerings 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.

We have experienced and continue to experience negative cash flows from operations and we expect to continue to incur net losses in the foreseeable future. Accordingly, in 2010, we restructured and consolidated our operations to focus on the GenDrive business. Please see “—Recent Developments” below for additional information regarding the restructuring. This restructuring is expected to decrease our operating expenses by \$12 to \$15 million annually starting in 2011.

As of December 31, 2010, we had approximately \$11.0 million and \$10.4 million of cash and cash equivalents and available-for-sale securities, respectively, to fund our future operations. We believe that our current cash, cash equivalents, available-for-sale securities balances and cash generated from future sales will provide sufficient liquidity to fund operations into or through the first quarter of 2012. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions (including those specified in the May 2010 restructuring plan described below), which do not include any funding from external sources of financing. Our future liquidity and capital requirements will depend upon numerous factors, including those identified in “Risk Factors— We expect we will need to raise additional capital to fund our operations beyond the first quarter of 2012 and such capital may not be available to us, in which case we may have to reduce and/or cease our operations.” As a result, we can provide no assurance that we will be able to fund our operations beyond 2011 without external financing. If we are unable to obtain additional capital prior to the end of 2011, we may not be able to sustain our future operations beyond the first quarter of 2012 and may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection. We cannot assure you that any necessary additional financing will be available on terms favorable to us, or at all. Given the difficult current economic environment, we believe that it could be difficult to raise additional funds and there can be no assurance as to the availability of additional financing or the terms upon which additional financing may be available. Additionally, even if we raise sufficient capital through equity or debt financing, strategic alliances or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow.

## **RECENT DEVELOPMENTS**

### **OGK-3**

On March 29, 2011, OJSC INTER RAO UES filed a Form 3 with the SEC reporting that on March 18, 2011 INTER RAO UES indirectly acquired a 74.7% interest in OGK-3. OGK-3 owns approximately 33.7% of our outstanding common stock. In the Form 3 INTER RAO UES also reported that, as of March 29, 2011, it directly owned 81.9% of OGK-3.

## **Service and Supply Agreement**

On February 2, 2010, the Company signed a service and supply agreement with the Raymond Corporation (Raymond), a global provider of material handling solutions that improve space utilization and productivity, with lower cost of operation and greater operator acceptance. Raymond is now an independent distributor for the sale, rental and lease of Plug Power GenDrive fuel cell units in North America. As an authorized service provider, Raymond also will provide warranty and maintenance service on GenDrive products through its North American Sales and Service Center Network. In addition, Raymond is a GenDrive authorized distributor of service parts.

On July 15, 2010, the Company and Ballard Power Systems Inc. (Ballard) announced an extension to their existing supply agreement through 2014. Ballard will remain the exclusive supplier of fuel cell stacks for the Company's full suite of GenDrive products. In addition, the Company will become the exclusive systems integrator for Ballard's fuel cell stack into solutions addressing the material handling market in North America. The previous agreement was due to expire December 31, 2010.

## **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 our on-going effort to improve performance and reduce cost of its GenDrive products for the material handling market, we began the development of a lithium based hybrid battery system to replace our 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.

## **Restructuring**

On May 25, 2010, the Company adopted a restructuring plan to focus and align the Company on its GenDrive business. As part of this plan, the Company has consolidated all operations to its Latham, New York headquarters and as such, the Company's operating expenses are expected to decrease by \$12 to \$15 million annually, preserving necessary capital to help accelerate market adoption in the material handling market. The Company recorded restructuring charges in the amount of \$8,096,838 within selling, general and administrative expenses in the consolidated statement of operations for 2010 in relation to this restructuring. At December 31, 2010, \$687,696 remains in accrued expenses on the consolidated balance sheets.

## **Licensing Agreement**

Effective October 26, 2010, the Company announced that it had licensed the intellectual property relating to its stationary power products, GenCore and GenSys, to IdaTech plc on a non-exclusive basis. Plug Power maintains ownership of, and the right to use, the patents and other intellectual property licensed to IdeaTech. As part of the transaction, Plug Power also sold inventory, equipment and certain other assets related to its stationary power business. Total consideration for the licensing and assets was \$5 million and was received during October 2010. The consideration is subject to reduction by a maximum of \$1 million in the event that the Company does not deliver certain of the assets sold. As of December 31, 2010, \$1.0 million is included in assets held for sale in the consolidated balance sheets.

## **Departure of Directors or Principal Officers**

On August 27, 2010, Mark A. Sperry stepped down from his positions as Senior Vice President of the Company and as General Manager of the Company's Continuous Power Division. The Company and Mr. Sperry have entered into an agreement under which Mr. Sperry will provide consulting services to the Company for a period of up to twelve (12) months. The Company's maximum obligation under the consulting agreement shall not exceed \$100,000.

On October 13, 2010, Jeffrey M. Drazen resigned as a member of the Board of Directors of the Company.

## **Debt and Lease Arrangement**

In March, 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. (Key Equipment) for the purpose of financing GenDrive products leased to Central Grocers. 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 December 2010, the Company assigned all of its rights, title and interest in the lease to Somerset Capital Group, Ltd. (Somerset), but the Company will continue to provide maintenance in accordance with the lease agreement. In conjunction with the lease assignment, the Key Equipment promissory note was completely paid off by the Company and the collateralized cash was released to the Company. The Company sold all of the equipment under the lease to Somerset.

During 2010, the Company entered into the second phase of leased assets with Central Grocers and assigned all of its rights, title and interest in the second phase lease to Somerset, but the Company will continue to provide maintenance in accordance with the lease agreement. The Company sold all of the equipment under the second phase lease to Somerset.

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.

## **RESULTS OF OPERATIONS**

### **Product and service revenue**

Effective April 1, 2010, the Company adopted ASU No. 2009-13 on Topic 605, Revenue Recognition— Multiple Deliverable Revenue Arrangements retroactive to January 1, 2010. ASU No. 2009-13 amends the FASB ASC to eliminate the residual method of allocation for multiple-deliverable revenue arrangements, and requires that arrangement consideration be allocated at the inception of an arrangement to all deliverables using the relative selling price method. As a result of implementing ASU No. 2009-13, we recognized approximately \$10.5 million during the year ended December 31, 2010 that would have been deferred under the Company's previous guidance for multiple-deliverable revenue arrangements. The Company anticipates that the effect of the adoption of this guidance on subsequent periods will be primarily based on the arrangements entered into and the timing of shipment of deliverables. See Note 19, Multiple-Deliverable Revenue Arrangements of the Consolidated Financial Statements, Part II, Item 8 of this Annual Report on Form 10-K for further discussion of our multiple-deliverable revenue arrangements.

For all product and service revenue transactions entered into prior to the implementation of ASU No. 2009-13, the Company will continue to defer the 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. While contract terms for those transactions generally required payment shortly after shipment or delivery and installation of the fuel cell system and were not contingent on the achievement of specific milestones or other substantive performance, the multiple-element revenue obligations within our contractual arrangements were generally not accounted for separately based on our limited experience and lack of evidence of fair value of the undelivered components.

Product and service revenue for the year ended December 31, 2010 increased \$10.9 million, or 225.7%, to \$15.7 million from \$4.8 million for the year ended December 31, 2009. Approximately \$10.5 million of the increase is related to the adoption of ASU No. 2009-13 as well as an increase in current period system shipments partially offset by a decrease in revenue from prior period system shipments that have now been fully accreted into income. A portion of 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, 2010, we shipped 660 fuel cell systems (562 are related to sales to end customers and 98 were delivered to Central Grocers under a lease arrangement whereby Plug Power retained title and ownership of the equipment until it subsequently sold the leases) as compared to 257 fuel cell systems (117 were related to sales to end customers and 140 were delivered to Central Grocers under a lease arrangement whereby Plug Power retained title and ownership of the equipment until it subsequently sold the leases) shipped during the year ended December 31, 2009. In the year ended December 31, 2010, we recognized approximately \$13.0 million of revenue for products shipped or delivered or services rendered in the year ended December 31, 2010 as compared to approximately \$1.7 million of revenue recognized in the year ended December 31, 2009. Additionally, in the year ended December 31, 2010, we recognized approximately \$2.7 million of product and services revenue from fuel cell shipments made prior to 2010, whereas in the year ended December 31, 2009, we recognized approximately \$3.1 million of product and service revenue from fuel cell shipments made prior to 2009.

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.

### **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 30% 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 the year ended December 31, 2010 decreased \$3.9 million, or 51.8%, to \$3.6 million from \$7.5 million for the year ended December 31, 2009. The decrease is primarily related to having fewer active contracts in 2010.

Research and development contract revenue for year ended December 31, 2009 decreased \$5.8 million, or 43.6%, to \$7.5 million from \$13.2 million for the year ended December 31, 2008. The decrease 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.

### **Cost of product and service revenue**

Cost of product and service revenue includes the direct material and labor cost as well as an allocation of overhead costs that relate to the manufacturing of products we sell. In addition, cost of product and service revenue also includes the labor and material costs incurred for product maintenance, replacement parts and service under our contractual obligations.

Cost of product and service revenue for the year ended December 31, 2010 increased \$15.9 million, or 218.9%, to \$23.1 million from \$7.2 million for the year ended December 31, 2009. The increase is primarily related to increased product and service fuel cell system shipments to end customers. There were 660 fuel cell system shipments for the year ended December 31, 2010, as compared to 257 for the year ended December 31, 2009, which includes 98 and 140 fuel cells, respectively, that were being accounted for under a lease arrangement until the sale of the leases. Therefore, the cost recognized on those shipments was recorded on the consolidated balance sheets as investment in leased property and was being depreciated over the lease term. The increase also includes an allocation of overhead costs charged to cost of product and service revenue as a result of increased sales and a focus on commercial production of our product. Accordingly, some of these costs were included in research and development expense prior to the third quarter of 2010, due to the Company's focus on research and development at that time.

Cost of product and service revenue for the year ended December 31, 2009 decreased \$4.2 million, or 36.7%, to \$7.2 million from \$11.4 million for the year ended December 31, 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 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, 2010 decreased \$6.1 million, or 48.8%, to \$6.4 million from \$12.4 million for the year ended December 31, 2009. This decrease is primarily related to having fewer active contracts in 2010.

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 from 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.

### **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, 2010 decreased \$3.4 million, or 21.0%, to \$12.9 million from \$16.3 million for the year ended December 31, 2009. This decrease was primarily a result of the wind-down of our operations in Plug Power Energy India Private Limited, Plug Power Canada as well as our Plug Power Holland organization. The decrease was also coupled with our allocation of overhead costs charged to cost of product and service revenue as a result of increased sales and a focus on commercial production of our product. Accordingly, some of these costs were included in research and development expense prior to this quarter, due to the Company's focus on research and development at that time.

Research and development expense for the year ended December 31, 2009 decreased \$18.7 million, or 53.3%, to \$16.3 million from 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.

### **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, 2010 increased \$10.1 million, or 65.8%, to \$25.6 million from \$15.4 million for the year ended December 31, 2009. This increase was primarily a result of the corporate restructuring plan announced in May 2010, which totaled \$8.1 million and a \$2.1 million write-off of assets from Plug Power Canada Inc.

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.

### **Gain on Sale of Assets**

Effective October 26, 2010, the Company licensed the intellectual property relating to its stationary power products, GenCore and GenSys, to IdaTech plc on a non-exclusive basis. Plug Power maintains ownership of, and the right to use, the patents and other intellectual property licensed to IdaTech. As part of the transaction, Plug Power also sold inventory, equipment and certain other assets related to its stationary power business. Total consideration for the licensing and assets was \$5 million and was received during October 2010. This consideration was net against costs incurred to close the transaction.

### **Amortization of intangible assets**

Amortization of intangible assets represents the amortization associated with the Company's acquired identifiable intangible assets from Plug Power Canada Inc., including acquired technology and customer relationships, which are being amortized over eight years.

Amortization of intangible assets increased to \$2.3 million for the year ended December 31, 2010, compared to \$2.1 million for the year ended December 31, 2009. The increase is related to foreign currency fluctuations.

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.

### **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.

Interest and other income and net realized gains from available-for-sale securities decreased to \$1.1 million for the year ended December 31, 2010 from \$1.7 million for the year ended December 31, 2009. This decrease is primarily related to lower cash balances coupled with lower yields on our investments due to a declining interest rate environment offset by increased rental income received from our Latham facility. Interest income on trading securities and available-for-sale securities for the year ended December 31, 2010 was approximately \$352,000 and \$179,000, respectively. 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 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.

### **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 elected to record this item at its fair value in accordance with FASB ASC No. 825-10-25, Fair Value Option. The third-party lender repurchased the securities on July 1, 2010 in accordance with the Repurchase Agreement. The corresponding Credit Line Agreement was paid in full on July 1, 2010 in conjunction with the repurchase of the auction rate debt securities. The change in fair value of approximately \$6.0 million and \$4.2 million during the years ended December 31, 2010 and 2009, respectively 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 \$6.0 million and \$4.2 million that is recorded as a gain in the consolidated statements of operations for the years ended December 31, 2010 and 2009, respectively. At December 31, 2009, the fair value of this item was \$6.0 million.

### **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 2010 and 2009.

### **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, 2010 was approximately \$487,000, compared to approximately \$1.1 million for the year ended December 31, 2009. Interest expense related to the Credit Line Agreement was approximately \$305,000 and \$915,000, respectively, for the years ended December 31, 2010 and 2009, respectively.

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.

### **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

Our fuel cell systems are designed to replace incumbent electric power technologies in material handling equipment. 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 and improving reliability.

Effective April 1, 2010, the Company adopted ASU No. 2009-13 on Topic 605, Revenue Recognition— Multiple Deliverable Revenue Arrangements retroactive to January 1, 2010. The objective of this ASU 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 ASU provides amendments to the criteria in Subtopic 605-25 for separating consideration in multiple-deliverable arrangements. The amendments in this ASU 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 (ESP) if neither VSOE nor TPE is available. The amendments in this ASU also 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 and expands the disclosure requirements related to a vendor's multiple-deliverable revenue arrangements. This ASU is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, however, the Company chose early adoption of this ASU.

The Company was previously prohibited from separating these multiple deliverables into individual units of accounting without VSOE of fair value or other TPE of fair value. This evidence was not available due to our limited experience and lack of evidence of fair value of the undelivered components of the sale. Without this level of evidence, the Company had to treat each sale as a single unit of accounting and defer the revenue recognition of each sale, recognizing revenue over a straight-line basis as the continued service, maintenance and other support obligations expired. Under ASU No. 2009-13, the requirement to have VSOE or TPE in order to recognize revenue has been modified, and it now allows the vendor to make its best estimate of the standalone selling price of deliverables when more objective evidence of selling price is not available.

For all product and service revenue transactions entered into prior to the implementation of ASU No. 2009-13, the Company will continue to defer the 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 extend over multiple years. While contract terms for those transactions generally required payment shortly after shipment or delivery and installation of the fuel cell system and were not contingent on the achievement of specific milestones or other substantive performance, the multiple-element revenue obligations within our contractual arrangements were generally not accounted for separately based on our limited experience and lack of evidence of fair value of the undelivered components.

See Note 19, Multiple-Deliverable Revenue Arrangements of the Consolidated Financial Statements, Part II, Item 8 of this Form 10-K for further discussion of our multiple-deliverable revenue arrangements.

The product and service revenue contracts entered into as of January 1, 2010 generally provide a one to two-year product warranty to customers from date of shipment. We currently estimate the costs of satisfying warranty claims based on an analysis of past experience and provide for future claims in the period the revenue is recognized. The Company carefully monitors the warranty work requested by its customers and management believes that its current warranty reserve appears adequate as of December 31, 2010. The Company's product and service warranty as of December 31, 2010 is approximately \$862,000 and is included in product warranty reserve in the consolidated balance sheets.

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 30% 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:

- 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, 2010, 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:

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**

As of December 31, 2010, the Company no longer held any trading securities - auction rate debt securities since they were repurchased in July, 2010 at par by the third-party lender holding the collateral under the Repurchase Agreement which resulted in a corresponding reduction in amounts outstanding and the extinguishment of the Credit Line Agreement. We valued 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 were made about future cash flows based upon interest rate formulas as described in Note 3, Fair Value Measurements. Also, our valuation included 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.

#### **LIQUIDITY AND CAPITAL RESOURCES**

We have experienced recurring operating losses and as of December 31, 2010, we had an accumulated deficit of approximately \$727.3 million. Substantially all of our losses resulted from costs incurred in connection with our operating expenses, research and development expenses and from general and administrative costs associated with our operations. To date, we have funded our operations primarily through private and public offerings of our common and preferred stock, our line of credit and maturities and sales of our available-for-sale securities. We anticipate incurring substantial additional losses and may never achieve profitability. Our May 2010 restructuring plan, which involves focusing on our GenDrive business and consolidating our operations into our Latham, New York facility, is expected to reduce these losses going forward. We anticipate that the restructuring will reduce our annual operating expenses by approximately \$12 to \$15 million, with all targeted expense reductions implemented by year end 2010.

As of December 31, 2010, we had approximately \$11.0 million and \$10.4 million of cash and cash equivalents and available-for-sale securities, respectively, to fund our future operations. We believe that our current cash, cash equivalents, available-for-sale securities balances and cash generated from future sales will provide sufficient liquidity to fund operations into or through the first quarter of 2012. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions (including those specified in the May 2010 restructuring plan described below), which do not include any funding from external sources of financing. In the event that our operating expenses are higher than anticipated or the gross margins and shipments of our GenDrive products do not increase as we expect, we may be required to implement contingency plans within our control to conserve and/or enhance our liquidity to meet operating needs. Such plans include; our ability to further reduce discretionary expenses, monetize our real estate assets through a sale-leaseback arrangement and obtain additional funding from licensing the use of our technologies. Our cash requirements relate primarily to working capital needed to operate and grow our business, including funding operating expenses, growth in inventory to support both shipments of new units and servicing the installed base, and continued development and expansion of our products. If our projections for significant order and shipment growth materialize, we believe we can obtain debt financing to fund the working capital needed to fulfill these orders and shipments. Our future liquidity and capital requirements will depend upon

numerous factors, including those identified in “Risk Factors— We expect we will need to raise additional capital to fund our operations beyond the first quarter of 2012 and such capital may not be available to us, in which case we may have to reduce and/or cease our operations.” As a result, we can provide no assurance that we will be able to fund our operations beyond 2011 without external financing. We continue to evaluate opportunities to raise additional capital to fund our business beyond 2011. Alternatives under consideration include equity or debt financings, strategic alliances or joint ventures. If we are unable to obtain additional capital prior to the end of 2011, we may not be able to sustain our future operations beyond the first quarter of 2012 and may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection. We cannot assure you that any necessary additional financing will be available on terms favorable to us, or at all. Given the difficult current economic environment, we believe that it could be difficult to raise additional funds and there can be no assurance as to the availability of additional financing or the terms upon which additional financing may be available. Additionally, even if we raise sufficient capital through equity or debt financing, strategic alliances or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us.

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

|  | <b>Years ended or at December 31,</b> |             |             |
|--|---------------------------------------|-------------|-------------|
|  | <b>2010</b>                           | <b>2009</b> | <b>2008</b> |
|  | <b>(in thousands)</b>                 |             |             |
| Cash and cash equivalents at end of period . . . . .                         | \$ 10,955                             | \$ 14,581   | \$ 80,845   |
| Trading securities – auction rate debt securities at end of period . . . . . | —                                     | 53,397      | 52,651      |
| Available-for-sale securities at end of period . . . . .                     | 10,403                                | 47,960      | 23,844      |
| Borrowings under line of credit at end of period . . . . .                   | —                                     | 59,375      | 62,875      |
| Working capital at end of period . . . . .                                   | 23,659                                | 60,009      | 86,171      |
| Net loss . . . . .   | 46,959                                | 40,709      | 121,700     |
| Net cash used in operating activities . . . . .                              | 40,770                                | 38,228      | 56,596      |
| Purchase of property, plant and equipment . . . . .                          | 1,100                                 | 533         | 1,419       |

Included in trading securities and working capital at December 31, 2009, was \$53.4 million of auction rate debt securities. The auction rate debt securities were secured by student loans which are generally guaranteed by the Federal government. These auction rate debt securities were 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 continued 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.

The Company had 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. 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 fair value of the Repurchase Agreement at its origination was \$10.2 million. The fair value of the Repurchase Agreement at December 31, 2010 and December 31, 2009 was \$0 and \$6.0 million, respectively and is recorded as an asset on the condensed consolidated balance sheets. The change in fair value of approximately \$6.0 million and \$4.2 million during the years ended December 31, 2010 and 2009, respectively, 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 \$6.0 million and \$4.2 million that is recorded as a gain in the consolidated statements of operations for the years ended December 31, 2010 and 2009, respectively.

Effective July 1, 2010, all auction rate debt securities were repurchased at par by the third-party lender holding the collateral under the Repurchase Agreement which resulted in a corresponding reduction in amounts outstanding and the extinguishment of the Credit Line Agreement.

### **Debt and Lease Arrangement**

In March, 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. (Key Equipment) for the purpose of financing GenDrive products leased to Central Grocers. 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 December 2010, the Company assigned all of its rights, title and interest in the lease to Somerset Capital Group, Ltd. (Somerset), but the Company will continue to provide maintenance in accordance with the lease agreement. In conjunction with the lease assignment, the Key Equipment promissory note was completely paid off by the Company and the collateralized cash was released to the Company. The Company sold all of the equipment under the lease to Somerset.

During 2010, the Company entered into the second phase of leased assets with Central Grocers and assigned all of its rights, title and interest in the second phase lease to Somerset, but the Company will continue to provide maintenance in accordance with the lease agreement. The Company sold all of the equipment under the second phase lease to Somerset.

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 Federal and state net operating loss carryforwards could be subject to significant IRC Section 382 limitations. As a result of certain equity transactions, the Company may have had an ownership change for IRC Section 382 purposes. Please refer to Part I Item 7 Recent Developments in this Annual Form 10-K.

Based upon an IRC Section 382 study, a Section 382 ownership change occurred in 2005 that resulted in approximately \$479 million of the \$674 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, 2010.

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. As of December 31, 2010, we had cash and cash equivalents of \$11.0 million, available-for-sale securities of \$10.4 million and working capital of \$23.7 million.

During the year ended December 31, 2010, cash used for operating activities was \$40.7 million, consisting primarily of a net loss of \$47.0 million offset, in part, by non-cash expenses in the amount of \$8.8 million, including \$7.2 million for amortization and depreciation, \$1.2 million for stock based compensation, \$1.0 million for the net proceeds/gain from the sale of assets, \$377,000 for loss on disposal of property, plant and equipment and leased assets and \$10,000 in bad debt. Cash provided by investing activities for the year ended December 31, 2010 was \$98.6 million, consisting primarily of \$59.4 million in proceeds from trading securities, \$37.4 million of maturities (net of purchases)

of available-for-sale securities and \$988,000 net for the investment and sale in leased property offset, in part, by \$1.1 million used to purchase property, plant and equipment. Cash used for financing activities for the year ended December 31, 2010 was approximately \$61.4 million consisting of \$59.4 million in repayment of borrowings under line of credit, \$442,000 for the purchase of treasury stock and \$1.6 million in principal payments on long-term debt.

Subsequent to December 31, 2010, we issued 508,790 shares of common stock for the achievement of performance objectives in 2010.

### Contractual Obligations

Contractual obligations as of December 31, 2010, under agreements with non-cancelable terms are as follows:

|                                   | <u>Total</u>       | <u>&lt;1 Year</u>  | <u>1-3 Years</u> | <u>3-5 Years</u> | <u>&gt;5 Years</u> |
|-----------------------------------|--------------------|--------------------|------------------|------------------|--------------------|
| Long-term debt obligations .....  | \$ 9,956           | \$ 9,956           | \$ —             | \$ —             | \$ —               |
| Operating lease obligations ..... | 3,080,282          | 584,131            | 846,189          | 633,646          | 1,016,316          |
| Purchase obligations (A) .....    | 1,275,796          | 1,275,796          | —                | —                | —                  |
| Other obligations (B), (C) .....  | 212,995            | 212,995            | —                | —                | —                  |
| Total .....                       | <u>\$4,579,029</u> | <u>\$2,082,878</u> | <u>\$846,189</u> | <u>\$633,646</u> | <u>\$1,016,316</u> |

(A) The Company has contractual obligations for consulting and miscellaneous office services and an obligation to assume or buy out the leases for batteries, chargers and battery changing equipment for a certain amount of stand up rider trucks at Central Grocers. On January 14, 2011, the Company bought out the leases for a total amount of \$958,817 and retains ownership of the equipment. See Note 18 (Commitments and Contingencies) of the Consolidated Financial Statements for more detail.

(B) 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.

(C) The Company has a contractual obligation pursuant to a development collaboration agreement with General Electric Company (GE). The Company and GE agreed to extend the terms of the agreement such that the Company's remaining obligation to purchase approximately \$363,000 of services as of December 31, 2009 under the agreement became due and payable; however, the Company and GE entered into a Lease Agreement for space in the Company's Latham, New York facility whereby the parties mutually agreed that 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 and India. Our exposure to changes in foreign currency rates primarily arises from short-term inter-company transactions with our Canadian and Indian 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, particularly between the U.S. dollar, the Canadian dollar and the Indian dollar. As exchange rates vary, the Company's results can be materially affected. As of December 31, 2010, all of the Company's operations have been relocated to the United States.



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.

#### **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 SEC'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, 2010.

##### **(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.

**PART III**

**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

**(a) DIRECTORS**

The number of directors of the Company is fixed at five, and the Board of Directors currently consists of five members. The Board of Directors is divided into three classes, with three directors in Class I, one director in Class II, and one director in Class III. Directors in Classes I, II and III serve for three-year terms with one class of directors being elected by the Company’s stockholders at each Annual Meeting of Stockholders. The Board of Directors has determined that Ms. Helmer and Messrs. Garberding, McNamee, and Willis are independent directors as defined in Rule 5605(a)(2) under the Marketplace Rules of the National Association of Securities Dealers, Inc. (the “NASDAQ Rules”).

The positions of Chief Executive Officer and Chairman of the Board are currently each filled by a different individual, Andrew Marsh and George McNamee, respectively; however, if the position of Chairman of the Board is vacant, or if he or she is absent, the Chief Executive Officer shall preside, when present, at meetings of stockholders and of the Board of Directors.

Set forth below is certain information regarding the directors of the Company, including the Class III Director who has been nominated for re-election at the Annual Meeting. The ages of and biographical information regarding the nominee for election as Class III Director at the Annual Meeting and each director who is not standing for election is based on information furnished to the Company by each nominee and director and is as of January 31, 2011.

| Name                                  | Age | Director Since |
|---------------------------------------|-----|----------------|
| <b>Class I—Term Expires 2012</b>      |     |                |
| Andrew Marsh . . . . .                | 54  | 2008           |
| Gary K. Willis (1)(2). . . . .        | 65  | 2003           |
| Maureen O. Helmer (1)(3). . . . .     | 54  | 2004           |
| <b>Class II—Term Expires 2013</b>     |     |                |
| George C. McNamee (2)(3). . . . .     | 64  | 1997           |
| <b>Class III—Term Expires 2011</b>    |     |                |
| Larry G. Garberding (1)(3)* . . . . . | 72  | 1997           |

\* Nominee for re-election.

- (1) Member of the Audit Committee.
- (2) Member of the Compensation Committee.
- (3) Member of the Corporate Governance and Nominating Committee.

The principal occupation and business experience for at least the last five years for each nominee and director of the Company is set forth below. The biographies of each of the nominees and continuing directors below contains information regarding the person’s service as a director, business experience, director positions held currently or at any time during the last five years, information regarding the experiences, qualifications, attributes or skills that caused the Corporate Governance Committee and the Board to determine that the person should serve as a director.

*Andrew J. Marsh* has served as Chief Executive Officer, President and member of the Board of Directors of the Company since April 8, 2008. Previously, Mr. Marsh was a co-founder of Valere Power where he served as President, CEO and director from the company’s inception in 2001 through its sale to Eltek ASA in 2007. Under his leadership, Valere grew into a profitable global operation with over 200 employees and \$90 million in revenues derived from the sale of DC power products to the telecommunications sector. During Mr. Marsh’s tenure, Valere Power received many awards such as the Tech Titan award as the fastest growing technology company in the Dallas Fort Worth area and the Red Herring Top 100 Innovator Award. Prior to founding Valere, he spent approximately eighteen years with Lucent Bell Laboratories where he held a variety of sales and technical management positions. Mr. Marsh is a member of the

board of directors of Power Distribution Inc., a company focused on quality power management. Mr. Marsh holds a Bachelor of Science in Electrical Engineering Technology from Temple University, a Master of Science in Electrical Engineering from Duke University and a Masters of Business Administration from Southern Methodist University. We believe Mr. Marsh's qualifications to sit on our Board include his record of success in leadership positions in technology companies having attributes similar to our Company, his extensive experience in management positions as well as his educational background in engineering and business administration.

*Gary K. Willis* has been a director of the Company since 2003. Mr. Willis joined Zygo Corporation's Board of Directors in June 2009 after retiring as Chairman of the Board of Directors in November 2000, having served in that capacity since November 1998. Zygo Corporation is a provider of metrology, optics, optical assembly, and systems solutions to the semiconductor, optical manufacturing, and industrial/automotive markets. Mr. Willis had been a director of Zygo Corporation since February 1992 and also served as its President from 1992 to 1999 and as its Chief Executive Officer from 1993 to 1999. Prior to joining Zygo Corporation, Mr. Willis served as the President and Chief Executive Officer of The Foxboro Company, a manufacturer of process control instruments and systems. Mr. Willis is also a director of Rofin-Sinar Technologies, Inc. since 1996 and Middlesex Health Services, Inc. since 1996. Mr. Willis holds a Bachelor of Science degree in Mechanical Engineering from Worcester Polytechnic Institute. We believe Mr. Willis' qualifications to sit on our Board include his extensive experience in management and director positions with similar companies as well as his educational background in mechanical engineering.

*Maureen O. Helmer* has been a director of the Company since 2004. Ms. Helmer is currently a member of the law firm Hiscock & Barclay LLP and is the Co-Chair of the firm's Regulatory Practice Group. Prior to her joining Hiscock & Barclay LLP in November 2008, Ms. Helmer was a member of Green & Seifter Attorneys, PLLC since October 2006. From 2003 through 2006 she practiced as a partner in the law firm of Couch White, LLP and then as a solo practitioner. In addition to serving as Chair of the New York State Public Service Commission (PSC) from 1998 to 2003, Ms. Helmer also served as Chair of the New York State Board on Electric Generation Siting and the Environment. Ms. Helmer has advised international energy, telecommunications and industrial companies on policy and government affairs issues. Prior to her appointment as Chair, Ms. Helmer served as Commissioner of the Public Service Commission from 1997 until 1998 and was General Counsel to the Department of the Public Service Commission from 1995 through 1997. From 1984 through 1995, Ms. Helmer held several positions in the New York Legislature. She also served as a board member of the New York State Energy Research and Development Authority, the New York State Environmental Board and the New York State Disaster Preparedness Commission during her tenure as Chair of the PSC. In addition, she was Vice Chair of the Electricity Committee of the National Association of Regulatory Utility Commissioners and a member of the NARUC Board of Directors. She was also appointed to serve as a member of the New York State Cyber-Security Task Force. Ms. Helmer earned her Bachelor of Science from the State University at Albany and her Juris Doctorate from the University of Buffalo law school. She is admitted to practice law in New York. We believe Ms. Helmer's qualifications to sit on our Board include her long history of experience with energy regulation, policy and government affairs and advising energy and industrial companies.

*George C. McNamee* serves as Chairman of the Company's Board of Directors and has served as such since 1997. Mr. McNamee is also Managing Partner of FA Tech Ventures, an information and energy technology venture capital firm, a director of iRobot Corporation (IRBT) since 1997 and Gleacher Securities, formerly Broadpoint Securities (BPSG), and previously Chairman of BPSG's predecessor First Albany Companies. Mr. McNamee's background in investment banking has given him broad exposure to many financing and merger and acquisition issues. As an executive, he has dealt with rapid-growth companies, technological change, crisis management, team building and strategy. As a public company director, Mr. McNamee led board special committees, chaired audit committees, chaired three boards and has been an active lead director. His past public company boards include Mechanical Technology Inc. (MTI) and Home Shopping Network (HSN). He has been an early stage investor, director and mentor for private companies that subsequently went public including MapInfo (now Pitney Bowes), META Group and IRBT. Mr. McNamee served on industry boards like the Securities Industry Association, the National Association of Securities Dealers (NASD) district committee, the National Stock Clearing Corporation and chaired the Regional Firms Advisory Committee of the New York Stock Exchange (NYSE). He served as an NYSE director from 1999 to 2004 and chaired its foundation. In the aftermath of the 1987 stock market crash, he chaired the Group of Thirty Committee to reform the Clearance and Settlement System. Mr. McNamee has been active as a director or trustee of civic organizations including The Albany Academies and Albany Medical Center, whose finance Committee he chaired for a dozen years. Mr. McNamee chaired New York State Comptroller Ned Regan's Temporary State Commission on State and Local Fiscal Policies and served as a member of the New York State Science and Tech Council for Governors Carey, Cuomo and Pataki. He is

also a director of several private companies, a member of the Yale Development Board and a Trustee of The American Friends of Eton College. He received his Bachelor of Arts degree from Yale University. We believe Mr. McNamee's qualifications to sit on our Board include his experience serving on countless boards, his background in investment banking and experience with the financial sector and its regulatory bodies.

*Larry G. Garberding* has served as a director of the Company since 1997. Mr. Garberding was a Director and Executive Vice President and Chief Financial Officer of DTE Energy Company and the Detroit Edison Company from 1990 until retiring in 2001. Mr. Garberding was a Certified Public Accountant, a partner with a major public accounting firm, and has been on the board of several corporations, having had responsibility for financial, operational, regulatory and sales activities. Mr. Garberding is currently a director of Altarum Institute, a non-profit research and innovations institute; H2Gen Innovations, Inc., a developer of hydrogen generation equipment; and Intermap Technologies Corporation, a digital mapping company, since 2001. Mr. Garberding received a Bachelor of Science degree in Industrial Administration from Iowa State University. We believe Mr. Garberding's qualifications to sit on our Board include his extensive experience with power and energy companies and his background in accounting, financing and operations.

**(b) EXECUTIVE OFFICERS**

The names and ages of all executive officers of the Company and the principal occupation and business experience for at least the last five years for each are set forth below. The ages of and biographical information regarding each executive officer is based on information furnished to the Company by each executive officer and is as of January 31, 2011.

| Executive Officers             | Age | Position  |
|--------------------------------|-----|---|
| Andrew Marsh . . . . .         | 54  | President, Chief Executive Officer and Director                                       |
| Gerald A. Anderson . . . . .   | 53  | Chief Financial Officer and Senior Vice President - Operations                        |
| Gerard L. Conway, Jr . . . . . | 46  | General Counsel, Corporate Secretary and Senior Vice President - Government Relations |
| Erik Hansen . . . . .          | 39  | Senior Vice President - Sales, Service and Hydrogen                                   |
| Adrian Corless . . . . .       | 44  | Chief Technology Officer, Senior Vice President - Engineering                         |
| Reid Hislop . . . . .          | 50  | Vice President - Marketing and Investor Relations                                     |

The principal occupation and business experience for at least the last five years for each executive officer of the Company is set forth below. The biographies of each of the executive officers below contains information regarding the person's service as an executive, business experience, director positions held currently or at any time during the last five years, information regarding the experiences, qualifications, attributes or skills that caused the Corporate Governance Committee and the Board to determine that the person should serve as an executive officer.

*Andrew Marsh's* biographical information can be found in the section entitled "Directors" in Part III Item 10(a) of this Annual Form 10-K.

*Gerald A. Anderson* joined Plug Power as Chief Financial Officer in July 2007 and, since March 2009, has also served as Senior Vice President. He is responsible for managing all aspects of the Company's financial, investor relations and information services operations. Prior to joining Plug Power, Mr. Anderson was the Treasurer and Director of Finance for Intermagnetics General Corporation. Utilizing an acquisition growth strategy, he managed finance, treasury, risk management and business valuation functions for the medical device manufacturing company. Prior to that, he was Chief Financial Officer for J Management Company. In addition to managing finance, controllership, merger and acquisition and treasury functions, he also helped set the strategic direction of the company. Earlier in his career, Mr. Anderson spent 15 years with KeyCorp, eventually as Senior Vice President, Director of Business Analysis and Management Reporting. He has 30 years of financial experience. He holds a Bachelor of Science degree in Business Administration, with a concentration in Accounting, from the University of Arizona.

*Gerard L. Conway, Jr.* has served as General Counsel and Corporate Secretary since September 2004 and, since March 2009, has also served as Senior Vice President. In that capacity, Mr. Conway is responsible for advising the Company on legal issues such as corporate law, securities, contracts, strategic alliances and intellectual property. He also serves as the Compliance Officer for securities matters affecting the Company. During his tenure, Mr. Conway served as Vice President of Government Relations from 2005 to June 2008 and in that capacity he advocated on

energy issues, policies, legislation and regulations on the state, federal, national and international levels on behalf of the Company and the alternative energy sector. Prior to his appointment to his current position, Mr. Conway served as Associate General Counsel and Director of Government Relations for the Company beginning in July 2000. Prior to joining Plug Power, Mr. Conway spent four years as an Associate with Featherstonhaugh, Conway, Wiley & Clyne, LLP, where he concentrated in government relations, business and corporate law. Mr. Conway has more than nineteen years of experience in general business, corporate real estate and government relations. Mr. Conway holds a Bachelor of Arts degree in English and Philosophy from Colgate University and a Juris Doctorate from Boston University School of Law.

*Erik Hansen* joined Plug Power Inc. as Vice President of Business Development in 2008 and was appointed Senior Vice President and General Manager of the Motive Power Division in October of 2009. Mr. Hansen is responsible for directing the Motive Power Division as it commercializes its fuel cell power products for material handling customers. Mr. Hansen has more than 15 years of experience with cutting edge technologies related to energy storage systems. Prior to joining Plug Power, he was General Manager of Sales and Systems Engineering for Cobasys LLC in Orion, Michigan, where he worked for eight years. In that role, Mr. Hansen led the decision-making and strategic planning for the manufacture and sales of advanced energy storage solutions for both the transportation and uninterruptible power systems. Mr. Hansen holds a Bachelor of Science degree in Electrical Engineering and a Bachelor of Science degree in Computer Engineering, both from West Virginia University.

*Adrian Corless* joined Plug Power in April 2007 as Vice President of Technology and was appointed Chief Technology officer in June 2008. As of February 2010, Mr. Corless was appointed Senior Vice President and Chief Technology Officer and is currently responsible for the development of Plug Power's Motive Power products as well as guiding Plug Power's overall technology and Intellectual Property strategies. Prior to joining Plug Power, Mr. Corless was the Chief Technical Officer of Cellex Power Products and was responsible for the technical aspects of the product development process. Prior to joining Cellex, Mr. Corless worked for Ballard Power Systems Inc. and Excellsis Inc. latterly as Program Manger for the Phase 4 fuel cell bus program. Mr. Corless is an active participant in the Industrial Truck Association, an executive board member of the Canadian Hydrogen and Fuel Cell Association, a Technical Advisory Board member for the NRC Institute for Fuel Cell Innovation, and a member of both UL and CSA standards development committees. Mr. Corless holds a Masters of Applied Science degree in Mechanical Engineering from the University of Victoria and is a Registered Professional Engineer in British Columbia, Canada.

*Reid Hislop* joined Plug Power in 2010 as Vice President of Marketing and Investor Relations. Mr. Hislop brings over twenty years of technology marketing experience and a long history of developing successful and innovative marketing programs to his role. For Plug Power, he leads the Company's Marketing Communications and Investor relations teams. He works directly with the Company's executive team to grow and strengthen its overall market position, vision and awareness in the alternative energy economy. Prior to joining Plug Power, Mr. Hislop was Vice President of Global Marketing for Pitney Bowes Business Insight (PBBI). PBBI was the business unit created shortly after MapInfo was acquired by Pitney Bowes in 2007. Prior to the acquisition, Mr. Hislop served as the Vice President of Marketing for MapInfo, where he led the Company's global marketing team, directed branding efforts and helped create MapInfo's leadership role in the Location Intelligence category. Mr. Hislop holds a Bachelor of Science degree from the University of Alberta, Canada.

Subject to any terms of any employment agreement with the Company (as further described in "Employment Agreements" under Item 12 below), each of the executive officers holds his or her respective office until the regular annual meeting of the Board of Directors following the Annual Meeting of Stockholders and until his or her successor is elected and qualified or until his or her earlier resignation or removal.

### **(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, LLC. 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**

The Company has a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act.

The Audit Committee consists of Messrs. Garberding (Chair) and Willis, and Ms. Helmer. The Audit Committee held six (6) meetings during Fiscal 2010 and each member attended all of the meetings during the period in which such person served on the committee.

#### **SECTION 16(A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE**

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires the Company's officers, as defined by Section 16, and directors, and persons who own more than 10% of the Company's outstanding shares of Common Stock (collectively, "Section 16 Persons"), to file initial reports of ownership and reports of changes in ownership with the SEC. Section 16 Persons are required by SEC regulations to furnish the Company with copies of all Section 16(a) forms they file.

A Form 5 was filed late on February 16, 2010 for Gerard L. Conway, Jr. to account for a sale of shares initiated by the broker to pay for the brokerage annual fee. Five Form 4s were filed late on February 19, 2010 for each of the Officers of the Company to account for the stock grants pursuant to the Plug Power 1999 Stock Option and Incentive Plan and the Executive Incentive Plan as amended July 30, 2008 and as approved by the Board of Directors on February 8, 2010. A Form 3 was filed late on February 25, 2010 for Adrian Corless once he was established as a Section 16 Person. Five Form 4s were filed late on July 20, 2010 for each of the Directors of the Company to account for quarterly stock compensation.

#### **ITEM 11. EXECUTIVE COMPENSATION**

##### **COMPENSATION DISCUSSION AND ANALYSIS**

We provide what we believe is a competitive total compensation package to our executive management team through a combination of base salary, annual incentive bonuses, long-term equity incentive compensation, and broad-based benefits programs. We place emphasis on pay-for-performance based incentive compensation, which is designed to reward our executives based on the achievement of predetermined performance goals. This Compensation Discussion and Analysis explains our compensation objectives, policies and practices with respect to our Chief Executive Officer, Chief Financial Officer, the other three most highly-compensated executive officers and an additional individual for whom disclosure would have been provided but for the fact that he was not serving as an executive officer of the Company at the end of the last completed fiscal year as determined in accordance with applicable SEC rules, who are collectively referred to as the "Named Executive Officers."

Mr. Sperry was formerly a party to an employment agreement with the Company that provided for a payment upon termination for other than "Cause." On August 27, 2010, Mr. Sperry was terminated as part of the Company's May 2010 restructuring to focus on harnessing commercial traction in the material handling market. In accordance with the terms of his employment agreement, the Company made a severance payment to Mr. Sperry in the amount of \$258,000.

##### **Objectives of Our Executive Compensation Programs**

Our compensation programs for our named executive officers are designed to achieve the following objectives:

- Attract and retain talented and experienced executives;
- Motivate and reward executives whose knowledge, skills and performance are critical to our success;
- Provide a competitive compensation package which is weighted towards pay-for-performance and in which total compensation is primarily determined by Company and individual results and the creation of shareholder value;
- Ensure fairness among the executive management team by recognizing the contributions each executive makes to our success; and
- Motivate our executives to manage our business to meet our short- and long-term objectives and reward them for meeting these objectives.

## **Our Executive Compensation Programs**

Our executive compensation primarily consists of base salary, annual incentive bonuses, long-term equity incentive compensation and broad-based benefits programs. Consistent with the emphasis we place on pay-for-performance based incentive compensation, long-term equity incentive compensation in the form of stock options and restricted stock constitute a significant portion of our total executive compensation.

Within the context of the overall objectives of our compensation programs, our Compensation Committee determined the specific amounts of compensation to be paid to each of our executives in 2010 based on a number of factors, including:

- Its understanding of the amount of compensation generally paid by similarly situated companies to their executives with similar roles and responsibilities;
- Our executives' performance during 2010 in general and as measured against predetermined performance goals;
- The nature, scope and level of our executives' responsibilities;
- Our executives' effectiveness in leading the Company's initiatives to increase customer value, productivity and revenue growth;
- The individual experience and skills of, and expected contributions from, our executives;
- The executive's contribution to the Company's commitment to corporate responsibility, including the executive's success in creating a culture of unyielding integrity and compliance with applicable law and the Company's ethics policies;
- The amounts of compensation being paid to our other executives;
- The executive's contribution to our financial results;
- Our executives' historical compensation at our Company; and
- Any contractual commitments we have made to our executives regarding compensation.

Each of the primary elements of our executive compensation is discussed in detail below, including a description of the particular element and how it fits into our overall executive compensation. Compensation paid to our named executive officers in 2010 is discussed under each element. In the descriptions below, we have identified particular compensation objectives which we have designed our executive compensation programs to serve; however, we have designed our compensation programs to complement each other and to collectively serve all of our executive compensation objectives described above. Accordingly, whether or not specifically mentioned below, we believe that, as a part of our overall executive compensation, each element to a greater or lesser extent serves each of our objectives.

### ***Base Salary***

We pay our executives a base salary which we review and determine annually. We believe that a competitive base salary is a necessary element of any compensation program designed to attract and retain talented and experienced executives. We also believe that attractive base salaries can motivate and reward executives for their overall performance. Base salaries are, in part, established based on the individual experience, skills, expected contributions of our executives, and our executives' performance during the prior year.

In 2010, we did not increase the base salaries of Mr. Marsh and Mr. Conway. The base salaries for these executives remained at the 2009 levels as follows: Mr. Marsh's base salary was \$375,000 per year and Mr. Conway's base salary was \$200,000 per year. Mr. Corless became a named executive officer in 2010 and his base salary was set at \$215,000. In 2010, we increased the base salaries of Mr. Anderson and Mr. Hansen as follows: Mr. Anderson's salary was increased from \$250,000 to \$300,000 and Mr. Hansen's salary was increased from \$200,000 to \$230,000. Our executives' base salaries reflect the initial base salaries that we negotiated with each of our executives at the time of his or her initial employment or promotion and our subsequent adjustments to these amounts to reflect market increases, the growth and stage of development of our Company, our executives' performance and increased experience, any changes in our executives' roles and responsibilities, and other factors. The initial base salaries that we negotiated with our executives were based on our understanding of the market at the time, the individual experience and skills of, and expected contribution from, each executive, the roles and responsibilities of the executive, the base salaries of our existing executives, and other factors.

### *Annual Incentive Bonuses*

Our named executive officers are eligible to receive annual incentive bonuses based on our pay-for-performance incentive compensation program. They are eligible to receive annual incentive bonuses primarily based upon their performance as measured against predetermined individual performance goals, including financial measures, achievement of strategic objectives, and other factors. The primary objective of this program is to motivate and reward our named executive officers for meeting individual performance goals. We do not believe that every important aspect of executive performance is capable of being specifically quantified in a predetermined performance goal. For example, events outside of our control may occur after we have established the named executive officers' individual performance goals for the year that require our named executive officers to focus their attention on different or other strategic initiatives; thus, the individual performance goals may be modified during the fiscal year by the President and Chief Executive Officer, or the Board of Directors in the case of the President and Chief Executive Officer himself, to account for such events beyond our control.

Within our pay-for-performance incentive compensation program, specific performance attainment levels are indicated for each performance goal. These performance attainment levels correlate to potential award amounts that are calculated as a percent of each executive's base salary.

We established attainment levels for each of our executives, other than Mr. Marsh, as 10%, 20% or 30% of his or her base salary to be awarded in the form of a stock grant. Since the annual incentive bonus is payable based on the achievement of each of the different levels of performance, the executive officer may earn between 0% and 30% of his base salary given his actual performance. The 20% attainment level is considered the target level for each performance goal because it is challenging for the executive to attain, and the executive would meet expectations if he achieved this level. The 10% attainment level is considered the threshold level for each performance goal because although still challenging, it is the minimum acceptable performance level. The 30% attainment level is considered the maximum, or stretch, level for each performance goal because it is most challenging for the executive to attain, and the executive would have to exceed expectations to achieve this level. Our maximum and threshold performance attainment levels are determined in relation to our target attainment levels and are intended to provide for correspondingly greater or lesser incentives in the event that performance is within an appropriate range above or below the target performance attainment level.

We also established attainment levels for our Chief Executive Officer as 17%, 34% or 50% of his base salary to be awarded in the form of a stock grant. Since the annual incentive bonus is payable based on the achievement of each of the different levels of performance, the Chief Executive Officer may earn between 0% and 50% of his base salary given his actual performance. The 34% attainment level is considered the target level for each performance goal because it is challenging for the Chief Executive Officer to attain, and the executive would meet expectations if he achieved this level. The 17% attainment level is considered the threshold level for each performance goal because although still challenging, it is the minimum acceptable performance level. The 50% attainment level is considered the maximum, or stretch, level for each performance goal because it is most challenging for the Chief Executive Officer to attain, and the Chief Executive Officer would have to exceed expectations to achieve this level. Our maximum and threshold performance attainment levels are determined in relation to our target attainment levels and are intended to provide for correspondingly greater or lesser incentives in the event that performance is within an appropriate range above or below the target performance attainment level.

As a way of linking each executive's performance to corporate-wide strategy, the executives' individual performance goals directly correlate to our corporate milestones, which management recommends to the Board of Directors and the Board of Directors approves after appropriate discussion and review. The executives' individual performance goals are determined in the same way as the corporate milestones such that management reviews how each executive may contribute to the corporate milestones and recommends individual performance goals to the Board of Directors. The Board of Directors, after appropriate discussion and review, ultimately approves the individual performance goals. Because disclosure of the specific individual performance goals would give competitors information that could be leveraged for competitive advantage, we do not disclose these specific individual performance goals or our executives' actual performance against such goals. Generally the individual performance goals, as well as the corporate milestones, fell into one or more of the following categories: (i) increase sales, (ii) meet product launch schedules, (iii) meet goals for number of units shipped, (iv) decrease product and fuel costs, and (v) decrease costs of business operations.

Initially, the CEO, and other members of management as appropriate, make a recommendation to the Compensation Committee of the Board of Directors for each executive's potential award amount based on his level of attainment of each of his individual performance goals (with the exception of the CEO himself whose level of attainment is evaluated by the Compensation Committee directly). Ultimately, the Board of Directors, after review and discussion and recommendation from the Compensation Committee, determines the final achieved level of attainment for each executive's individual performance goals. In 2010, no annual incentive awards in the form of stock grants were made to the named executive officers.

### ***Long-Term Equity Incentive Compensation***

We grant long-term equity incentive awards in the form of stock options and restricted stock to executives as part of our total compensation package. Consistent with our emphasis on pay-for-performance based incentive compensation, these awards represent a significant portion of total executive compensation. Based on the stage of our Company's development and the incentives we aim to provide to our executives, we have chosen to use either stock options or a combination of stock options and restricted stock as our long-term equity incentive awards. Our decisions regarding the amount and type of long-term equity incentive compensation and relative weighting of these awards among total executive compensation have also been based on our understanding of market practices of similarly situated companies and our negotiations with our executives in connection with their initial employment or promotion by our Company.

Additionally, the Board adopted stock ownership guidelines for named executives, effective as of August 15, 2005, which are also considered when granting long-term equity incentive awards to executives. These guidelines provide a target level of Company equity holdings with which named executives are expected to comply within five (5) years from the latter of the effective date of the guidelines or the date the individual is first appointed as an executive. The target stock holdings are determined as a multiple of the named executive's base salary and then converted to a fixed number of shares. The named executive's base salary is multiplied by five (5) for Chief Executive Officer and by three (3) for all other named executives; that product is divided by Plug Power's 200-day average common stock price as reported by the NASDAQ Global Market; and finally that amount is then rounded to the nearest 100 shares. The following count towards satisfaction of these stock ownership guidelines: (i) shares owned outright by the executive or his or her immediate family members residing in the same household; (ii) stock held in the Plug Power Inc. Savings and Retirement Plan (401K Plan); (iii) stock held in the Plug Power Inc. Employee Stock Purchase Plan (ESPP); (iv) restricted stock issued as part of an executive's annual or other bonus whether or not vested; (v) shares acquired upon the exercise of employee stock options; (vi) shares underlying unexercised employee stock options as part of the Plug Power Inc. Employee Stock Option Plan (ESOP) times a factor of thirty-three percent; and (vii) shares held in trust.

Stock option awards provide our executive officers with the right to purchase shares of our common stock at a fixed exercise price typically for a period of up to ten years, subject to continued employment with our Company. Stock options are earned on the basis of continued service and generally vest over three years, beginning with one-third vesting on the first anniversary of the grant date, one-third vesting on the second anniversary of the grant date and the final one-third vesting on the third anniversary of the grant date, subject to acceleration in certain circumstances. Stock option awards are made pursuant to our 1999 Stock Option and Incentive Plan. Except as may otherwise be provided in the applicable stock option award agreement, stock option awards become fully exercisable upon a change of control under the 1999 Stock Option and Incentive Plan. The exercise price of each stock option granted under our 1999 Stock Option and Incentive Plan is the closing price of our common stock on the NASDAQ Capital Market as of the effective date of each grant.

Grants to new hires and grants relating to an existing executive officer's promotion may be made on a periodic basis. All grants to executive officers are approved by the Compensation Committee. We consider a number of factors in determining the number of stock options, if any, to grant to our executives, including:

- the number of shares subject to, and exercise price of, outstanding options, both vested and unvested, held by our named executive officers;
- the vesting schedule of the unvested stock options held by our named executive officers; and
- the amount and percentage of our total equity on a diluted basis held by our named executive officers.

Restricted stock awards provide our executive officers with shares of our stock that they may retain or trade; however, all executive officers must trade within their rights according to our Insider Trading Policy. The restricted stock is intended to be a long-term incentive alternative to the stock option awards that may be appropriate for executive officers based on their performance and their critical skills. Restricted stock awards may vest over three years, beginning with one-third vesting one year after the date of grant, then pro-rata vesting monthly thereafter. Restricted stock awards are made pursuant to our 1999 Stock Option and 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 on which restrictions shall lapse each year will vary depending on the Company's progress achieving the corresponding threshold, target or stretch goals.

Restrictions shall lapse with respect to the corresponding revenue RSUs based on the following sample schedule, depending on the Company's achievement of the Revenue targets for 2010, 2011 and 2012:

| <b>FOR ACHIEVEMENT OF REVENUE PERFORMANCE TARGETS</b> |                   |                |               |                  |
|---|-------------------|----------------|---------------|------------------|
|   | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
| <b>2010 PERFORMANCE</b>                               | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 3,831            |
| >= Threshold and < Target                             | 13,931            | 20%            | 2,786         | 1,045            |
| >= Target and < Stretch                               | 17,413            | 20%            | 3,483         | 348              |
| >= Stretch  | 19,155            | 20%            | 3,831         | 0                |
| <b>2011 PERFORMANCE</b>                               | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
|   | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 4,789            |
| >= Threshold and < Target                             | 13,931            | 25%            | 3,483         | 1,306            |
| >= Target and < Stretch                               | 17,413            | 25%            | 4,353         | 436              |
| >= Stretch  | 19,155            | 25%            | 4,789         | 0                |
| <b>2012 PERFORMANCE</b>                               | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
|   | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 10,535           |
| >= Threshold and < Target                             | 13,931            | 55%            | 7,662         | 2,873            |
| >= Target and < Stretch                               | 17,413            | 55%            | 9,577         | 958              |
| >= Stretch  | 19,155            | 55%            | 10,535        | 0                |



Restrictions shall lapse with respect to the corresponding EBITDAS RSUs based on the following sample schedule, depending on the Company's achievement of the EBITDAS targets for 2010, 2011 and 2012:

| <b>FOR ACHIEVEMENT OF EBITDAS PERFORMANCE TARGETS</b> |                   |                |               |                  |
|---|-------------------|----------------|---------------|------------------|
|   | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
| <b>2010 PERFORMANCE</b>                               | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 11,493           |
| >= Threshold and < Target                             | 41,791            | 20%            | 8,358         | 3,135            |
| >= Target and < Stretch                               | 52,240            | 20%            | 10,448        | 1,045            |
| >= Stretch  | 57,463            | 20%            | 11,493        | 0                |
| <b>2011 PERFORMANCE</b>                               | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
|   | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 14,366           |
| >= Threshold and < Target                             | 41,791            | 25%            | 10,448        | 3,918            |
| >= Target and < Stretch                               | 52,240            | 25%            | 13,060        | 1,306            |
| >= Stretch  | 57,463            | 25%            | 14,366        | 0                |
| <b>2012 PERFORMANCE</b>                               | <b>RSU</b>        | <b>Percent</b> | <b>RSU's</b>  | <b>RSU's</b>     |
|   | <b>Allocation</b> | <b>Vesting</b> | <b>Earned</b> | <b>Forfeited</b> |
| < Threshold   | 0                 | 0%             | 0             | 31,604           |
| >= Threshold and < Target                             | 41,791            | 55%            | 22,985        | 8,619            |
| >= Target and < Stretch                               | 52,240            | 55%            | 28,732        | 2,872            |
| >= Stretch  | 57,463            | 55%            | 31,604        | 0                |

For example, assuming the Company achieves stretch revenue and EBITDAS metrics, restrictions on a maximum of 20% of total awarded RSUs will lapse in 2011 for performance in 2010; restrictions on a maximum of 25% of total awarded RSUs will lapse in 2012 for performance in 2011; and restrictions on a maximum of 55% of total awarded RSUs will lapse in 2013 for performance in 2012. Alternatively, if at the end of the fiscal year it is determined that the Company failed to achieve these articulated performance-based metrics, a percentage of RSUs will be forfeited for that fiscal year.

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.

In 2010, no threshold, target or stretch revenue and EBITDAS performance-based metrics were reached. Accordingly, no restrictions lapsed with respect to the 2010 performance period and 20% of the total awarded RSUs for the Named Executive Officers were forfeited as follows: Mr. Marsh - 257,813 RSUs, Mr. Anderson - 158,654 RSUs, Mr. Conway - 95,192 RSUs, Mr. Hansen - 95,192 RSUs and Mr. Corless - 91,942 RSUs.

#### *Broad-Based Benefits*

All full-time employees, including our named executive officers, may participate in our health and welfare benefit programs, including medical, dental, and vision care coverage, disability insurance and life insurance, and our 401(k) plan.

#### **Our Executive Compensation Process**

The Compensation Committee of our Board of Directors is responsible for determining the compensation for our named executive officers. The Compensation Committee is composed entirely of non-employee directors who are "independent" as that term is defined in the applicable NASDAQ rules. In determining executive compensation, our Compensation Committee annually reviews the performance of our executives with our Chief Executive Officer, and our Chief Executive Officer makes recommendations to our Compensation Committee with respect to the appropriate base salary, annual incentive bonuses and performance measures, and grants of long-term equity incentive awards for each of our executives. The Chairman of the Compensation Committee makes recommendations to the Compensation

Committee with regards to the Chief Executive Officer's compensation. The Compensation Committee makes its determination regarding executive compensation and then recommends such determination to the Board of Directors. The Board of Directors ultimately approves executive compensation.

As a result, the total amount of compensation that we paid to our executives, the types of executive compensation programs we maintained, and the amount of compensation paid to our executives under each program has been determined by our Compensation Committee and Board of Directors based on their understanding of the market, experience in making these types of decisions, and judgment regarding the appropriate amounts and types of executive compensation to provide.

## SUMMARY COMPENSATION

The following table sets forth information concerning compensation for services rendered in all capacities awarded to, earned by or paid in the last three fiscal years to the Company's Named Executive Officers.

### *Summary Compensation Table*

| <u>Name and Principal Position</u>  | <u>Year</u> | <u>Salary<br/>(\$)<br/>(1)</u> | <u>Stock<br/>Awards<br/>(\$)<br/>(2)</u> | <u>Option<br/>Awards<br/>(\$)<br/>(3)</u> | <u>All Other<br/>Compensation<br/>(\$)</u> | <u>Total<br/>(\$)</u> |
|---|-------------|--------------------------------|--|---|--|-----------------------|
| Andrew Marsh (4) . . . . .  | 2010        | 375,000                        | —  | —   | 12,526 (5)                                 | 387,526               |
| President, Chief Executive<br>Officer and Director  | 2009        | 382,212                        | 57,562                                   | 1,775                                     | 48,742 (5)                                 | 490,291               |
|   | 2008        | 272,596                        | 109,835                                  | 832,000                                   | 127,864 (5)                                | 1,342,295             |
| Gerald A. Anderson . . . . .  | 2010        | 258,654                        | —  | —   | 12,526 (6)                                 | 271,180               |
| Chief Financial Officer and<br>Senior Vice President - Operations                           | 2009        | 254,807                        | 50,150                                   | 1,775                                     | 12,526 (6)                                 | 319,258               |
|   | 2008        | 248,577                        | 87,256                                   | 42,120                                    | 11,995 (6)                                 | 389,948               |
| Gerard L. Conway, Jr. (7) . . . . .   | 2010        | 200,000                        | —  | —   | 180 (8)                                    | 200,180               |
| General Counsel, Corporate Secretary<br>and Senior Vice President -<br>Government Relations | 2009        | 203,846                        | 38,300                                   | 1,775                                     | 180 (8)                                    | 244,101               |
|   | 2008        | 197,693                        | 80,500                                   | 42,120                                    | 7,757 (8)                                  | 328,070               |
| Erik J. Hansen (9) . . . . .  | 2010        | 209,034                        | —  | —   | 9,346 (10)                                 | 218,380               |
| Senior Vice President -<br>Sales, Service and Hydrogen                                      | 2009        | 181,000                        | 37,400                                   | 1,775                                     | 9,158 (10)                                 | 229,333               |
|   | 2008        | —                              | —  | —   | —  | —                     |
| Adrian Corless (11) . . . . .   | 2010        | 215,827                        | —  | —   | 61,122 (12)                                | 276,949               |
| Chief Technology Officer,<br>Senior Vice President - Engineering                            | 2009        | —                              | —  | —   | —  | —                     |
|   | 2008        | —                              | —  | —   | —  | —                     |
| Mark A. Sperry (13) . . . . .   | 2010        | 193,828                        | —  | —   | 258,000 (14)                               | 451,828               |
| Senior Vice President and<br>General Manager of<br>Continuous Power Division                | 2009        | 262,962                        | 18,602                                   | 1,775                                     | 12,430 (14)                                | 295,769               |
|   | 2008        | 257,231                        | 77,399                                   | 42,120                                    | 11,499 (14)                                | 388,249               |

(1) This column represents the dollar amount of base salary actually paid to executives. During 2009, our fiscal calendar included fifty-three (53) pay periods, and therefore, each executive earned one (1) additional week of base pay.

(2) This column represents the aggregate grant date fair value of the stock award computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures. Fair value is calculated using the closing price of Plug Power stock on the date of grant. For additional information on stock awards, refer to note

14 of the Company's consolidated financial statements in the Form 10-K for the year ended December 31, 2010, as filed with the SEC. These amounts reflect the Company's accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executives.

- (3) This column represents the aggregate grant date fair value of the option award computed in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures. For additional information on the valuation assumptions with respect to option awards, refer to note 14 of the Company's consolidated financial statements in the Form 10-K for the year ended December 31, 2010, as filed with the SEC. These amounts reflect the Company's accounting expense for these awards, and do not correspond to the actual value that will be recognized by the named executives.
- (4) Mr. Marsh was hired in April 2008, and therefore he received compensation in 2008 for nine months.
- (5) Includes the Company's share of contributions on behalf of Mr. Marsh to the Plug Power 401(k) savings plan in the amount of \$12,250, \$12,250 and \$10,130 in the years ended 2010, 2009 and 2008, respectively, payments of \$276, \$276 and \$673 for supplemental life insurance premiums in the years ended 2010, 2009 and 2008, respectively, and payments of \$36,216 and \$117,061 for moving and relocation expenses in 2009 and 2008, respectively.
- (6) Includes the Company's share of contributions on behalf of Mr. Anderson to the Plug Power 401(k) savings plan in the amount of \$12,250, \$12,250 and \$11,443 in the years ended 2010, 2009 and 2008, respectively, and payments of \$276, \$276 and \$552 for supplemental life insurance premiums in the years ended 2010, 2009 and 2008, respectively.
- (7) Mr. Conway became a named executive officer in 2008.
- (8) Includes the Company's share of contributions on behalf of Mr. Conway to the Plug Power 401(k) savings plan in the amount of \$0, \$0 and \$7,577 in the years ended 2010, 2009 and 2008, respectively, and payments of \$180, \$180 and \$180 for supplemental life insurance premiums in the years ended 2010, 2009 and 2008, respectively.
- (9) Mr. Hansen became a named executive officer in 2009.
- (10) Includes the Company's share of contributions on behalf of Mr. Hansen to the Plug Power 401(k) savings plan in the amount of \$9,346 and \$9,158 in the years ended 2010 and 2009, respectively.
- (11) Mr. Corless became a named executive officer in 2010.
- (12) Includes the Company's share of contributions on behalf of Mr. Corless of \$120 for supplemental life insurance premiums in the year ended 2010, as well as a stipend of \$61,000 related to moving and relocation expenses.
- (13) On August 27, 2010, Mark. A. Sperry's position was eliminated and he subsequently stepped down from his position as Senior Vice President and General Manager of the Company's Continuous Power Division.
- (14) Includes the Company's share of contributions on behalf of Mr. Sperry to the Plug Power 401(k) savings plan in the amount of \$0, \$12,250, and \$11,125 in the years ended 2010, 2009 and 2008, respectively, and payments of \$0, \$180 and \$374 for supplemental life insurance premiums in the years ended 2010, 2009 and 2008, respectively, and a severance payment of \$258,000 in 2010.

#### **GRANTS OF PLAN-BASED AWARDS TABLE**

There were no equity awards granted to the named executive officers in 2010.

#### **DISCUSSION OF SUMMARY COMPENSATION AND GRANTS OF PLAN-BASED AWARDS TABLES**

Our executive compensation policies and practices, pursuant to which the compensation set forth in the Summary Compensation Table and the Grants of Plan Based Awards Table was paid or awarded, are described above under "Compensation Discussion and Analysis." A summary of certain material terms of our compensation plans and arrangements is set forth below.

## Employment Agreements

The Company and Mr. Marsh are parties to an employment agreement which renews automatically for successive one-year terms unless Mr. Marsh or the Company gives notice to the contrary. Mr. Marsh receives an annual base salary of \$375,000 and is eligible to: (i) receive an annual incentive bonus of up to an amount equal to fifty percent (50%) of his annual base salary; (ii) participate in all savings and retirement plans; and (iii) participate in all benefit and executive perquisites. Mr. Marsh's employment may be terminated by the Company for "Cause", as defined in the agreement, or by Mr. Marsh for "Good Reason", as defined in the agreement, or without "Good Reason" upon written notice of termination to the Company. If Mr. Marsh's employment is terminated by the Company for any reason other than cause, death or disability, or in the event that Mr. Marsh terminates his employment with the Company and is able to establish "Good Reason", the Company is obligated to pay Mr. Marsh the sum of the following amounts:

- (i) any earned but unpaid annual base salary,
- (ii) incentive bonus earned but not yet paid,
- (iii) unpaid expense reimbursements,
- (iv) accrued but unused vacation, plus
- (v) any benefits that may have vested under any employee benefit plan of the Company through the date of termination; plus:
  - (a) one (1) times annual base salary and
  - (b) one (1) times the annual incentive bonus for the immediately preceding fiscal year.

In addition, Mr. Marsh is entitled to fully vest as of the date of termination in any outstanding restricted stock, stock options and other stock awards previously granted that would have vested had he remained an employee for an additional twelve (12) months following the date of termination. Furthermore, the Company is required to continue paying health insurance and other benefits to Mr. Marsh and his eligible family members for twelve (12) months following his termination. The agreement also provides, among other things, that if, within twelve (12) months after a "Change in Control", as defined in the agreement, the Company terminates such executive's employment without Cause, then such executive shall be entitled to:

- (i) receive a lump sum payment equal to three (3) times the sum of (1) his current annual base salary plus (2) his average annual incentive bonus over the three (3) fiscal years prior to the Change in Control (or his annual incentive bonus for the fiscal year immediately preceding to the Change of Control, if higher),
- (ii) continued vesting of his stock options and other stock-based awards for twelve (12) months following the Change of Control as if he had remained an active employee, and
- (iii) receive benefits, including health and life insurance for twelve (12) months following the Change of Control.

The Company and Messrs. Anderson, Conway, Hansen and Corless are parties to Executive Employment Agreements pursuant to which if any of their employment is terminated by the Company for any reason other than "Cause", as defined in the agreement, death or disability, or in the event that any terminates his employment with the Company and is able to establish "Good Reason", as defined in the agreement, the Company is obligated to pay each the sum of the following amounts:

- (i) any earned but unpaid annual base salary,
- (ii) incentive bonus earned but not yet paid,
- (iii) unpaid expense reimbursements,
- (iv) accrued but unused vacation, plus
- (v) any benefits that may have vested under any employee benefit plan of the Company through the date of termination; plus (a) one (1) times annual base salary.

In addition, each is entitled to exercise any vested stock options for twelve (12) months following the date of termination. Furthermore, the Company is required to continue paying health insurance and other benefits to each and his eligible family members for twelve (12) months following his termination. The Executive Employment Agreements also provide, among other things, that if, within twelve (12) months after a “Change in Control”, as defined in the agreement, the Company terminates such executive’s employment without Cause, then such executive shall be entitled to:

- (i) receive a lump sum payment equal to the sum of (1) his average annual base salary over the three (3) fiscal years immediately prior to the Change of Control (or the executive’s annual base salary in effect immediately prior to the Change of Control, if higher) and (2) his average annual bonus over the three (3) fiscal years prior to the Change in Control (or the executive’s annual bonus in effect immediately prior to the Change of Control, if higher),
- (ii) continued vesting of his stock options for twelve (12) months following the Change of Control as if he had remained an active employee, and
- (iii) receive benefits, including health and life insurance for twelve (12) months following the Change of Control.

### **Annual Incentive Bonuses**

We established incentive bonus potentials for each of our named executive officers as a percentage of that executive’s base salary according to the executives’ achievement of a number of predetermined performance goals, as described above under “Our Executive Compensation Programs – Annual Incentive Bonuses.” With the exception of Mr. Marsh, each executive has the ability to earn a stock grant equivalent to between 0% and 30% of his base salary given his actual performance. Mr. Marsh has the ability to earn a stock grant equivalent to between 0% and 50% of his base salary given his actual performance. In 2010, no annual incentive awards in the form of stock grants were made to the named executive officers.

### **2010 Stock Option Grants**

There were no equity awards granted to the named executive officers in 2010.

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

#### ***Administration***

Our Board of Directors currently administers our 1999 Stock Option and Incentive Plan. The Compensation Committee of our Board of Directors is responsible for reviewing all of our executive compensation plans.

#### ***Eligibility***

All of our employees, consultants and non-employee directors are eligible to be granted awards under our 1999 Stock Option and Incentive Plan. An employee, consultant or non-employee director granted an award is a participant under our 1999 Stock Option and Incentive Plan.

#### ***Number of Shares Available for Issuance***

The maximum number of shares of our common stock that are authorized for issuance under our 1999 Stock Option and Incentive Plan as of January 1, 2011 is 22,355,685. Shares issued under the 1999 Stock Option and Incentive Plan may be treasury shares or authorized but unissued shares. In the event the number of shares to be delivered upon the exercise or payment of any award granted under the 1999 Stock Option and Incentive Plan is reduced for any reason or in the event that any award (or portion thereof) can no longer be exercised or paid, the number of shares no longer subject to such award shall be released from such award and shall thereafter be available under the 1999 Stock Option and Incentive Plan for the grant of additional awards. Upon the occurrence of a merger, consolidation, recapitalization, reclassification, stock split, stock dividend, combination of shares or the like, the plan administrator may ratably adjust the aggregate number and affected class of securities available under the 1999 Stock Option and Incentive Plan.



### ***Types of Awards***

The plan administrator may grant the following types of awards under our 1999 Stock Option and Incentive Plan: stock options; restricted stock; or other stock-based awards. Stock options awarded under our 1999 Stock Option and Incentive Plan may be nonqualified stock options or incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended. With the exception of incentive stock options, the plan administrator may grant, from time to time, any of the types of awards under our 1999 Stock Option and Incentive Plan to our employees, consultants and non-employee directors. Incentive stock options may only be granted to our employees.

### ***Stock Options***

A stock option is the right to acquire shares of our common stock at a fixed price for a fixed period of time and generally is subject to a vesting requirement. To date, as a matter of practice, options have generally been subject to a three-year vesting period, with one-third of the total award vesting at the first anniversary of the grant date and the remainder vesting in equal thirds each anniversary thereafter. A stock option will be in the form of a nonqualified stock option or an incentive stock option. The exercise price is set as the market price on the grant date. The term of a stock option may not exceed ten years or five years in the case of incentive stock options granted to a 10% owner. Our 1999 Stock Option and Incentive Plan also allows for the early exercise of unvested options, provided that right is permitted in the applicable stock option agreement. All outstanding unvested shares of our common stock acquired through early exercised options are subject to repurchase by us. After termination of an optionee, he or she may exercise his or her vested options for the period of time stated in the stock option agreement. If termination is for cause, vested options may no longer be exercised. In all other cases, the vested options will remain exercisable for executives twelve (12) months. However, an option may not be exercised later than its expiration date.

### ***Restricted Stock***

A restricted stock award is an award entitling the recipient to acquire, at par value or such other higher purchase price determined by the administrator, shares of stock subject to such restrictions and conditions as the administrator may determine at the time of grant. Conditions may be based on continuing employment (or other business relationship) and/or achievement of pre-established performance goals and objectives. The grant of a restricted stock award is contingent on the participant executing the restricted stock award agreement. Restricted stock awards are shares of our common stock that are subject to cancellation, restrictions and vesting conditions, as determined by the plan administrator. Restricted stock awards generally vest over three years, beginning with one-third vesting one year after the date of grant, then pro-rata vesting monthly thereafter. Restricted stock awards are made pursuant to our 1999 Stock Option and Incentive Plan.

### ***Other Awards***

The administrator of the 1999 Stock Option and Incentive Plan also may grant other forms of awards that generally are based on the value of our common stock as determined by the plan administrator to be consistent with the purposes of our 1999 Stock Option and Incentive Plan including restricted Stock units. A restricted Stock unit is a commitment by the Company to issue a share of our Common Stock for each restricted Stock unit at the time that the restrictions set in forth in the award lapse or are satisfied.

### ***Amendment and Discontinuance; Term***

The plan administrator may amend, suspend or terminate our 1999 Stock Option and Incentive Plan at any time, with or without prior notice to or consent of any person, except as would require the approval of our stockholders, be required by law or the requirements of the exchange on which our common stock is listed or would adversely affect a participant's rights to outstanding awards without their consent. The Company's shareholders approved an amendment to the 1999 Stock Option and Incentive Plan on May 16, 2001, and the date of this amendment constitutes the effective date of the 1999 Stock Option and Incentive Plan. Unless terminated earlier, our 1999 Stock Option and Incentive Plan will expire on the tenth anniversary of its effective date, which is May 16, 2011.

## OUTSTANDING EQUITY AWARDS AT 2010 FISCAL YEAR-END

The following table provides information on the holdings of stock options by the Named Executive Officers as of December 31, 2010. For additional information about the option awards and stock awards, see the description of equity incentive compensation in the section titled “Compensation Discussion and Analysis” under Item 11 above.

| Name                          | Option Awards   |   |                            |                        | Stock Awards   |   |
|-------------------------------|---|---|----------------------------|------------------------|--|---|
|                               | Number of Securities Underlying Unexercised Options Exercisable | Number of Securities Underlying Unexercised Options Unexercisable | Option Exercise Price (\$) | Option Expiration Date | Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Yet Vested (1) | Equity Incentive Plan Awards: Market or Payout Value Of Unearned Shares, Units, or Other Rights That Have Not Yet Vested (\$) (2) |
| Andrew Marsh . . . . .        | 400,000   |   | 3.58                       | 04/08/18               | 750,000  | 277,500   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |
|                               |   | 1,666   | 0.95                       | 05/20/19               |  |   |
| Gerald A. Anderson . . . . .  | 45,000  |   | 3.33                       | 07/09/17               | 461,539  | 170,769   |
|                               | 27,000  |   | 2.60                       | 01/24/18               |  |   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |
|                               |   | 1,666   | 0.95                       | 05/20/19               |  |   |
| Gerard L. Conway, Jr. . . . . | 1,871   |   | 8.53                       | 11/14/11               | 276,923  | 102,462   |
|                               | 2,250   |   | 8.53                       | 11/14/11               |  |   |
|                               | 8,000   |   | 6.73                       | 12/22/13               |  |   |
|                               | 12,000  |   | 5.39                       | 01/28/15               |  |   |
|                               | 30,000  |   | 5.58                       | 02/01/16               |  |   |
|                               | 30,000  |   | 3.75                       | 02/14/17               |  |   |
|                               | 27,000  |   | 2.60                       | 01/24/18               |  |   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |
|                               |   | 1,666   | 0.95                       | 05/20/19               |  |   |
| Erik J. Hansen . . . . .      | 50,000  |   | 0.86                       | 10/29/18               | 276,923  | 102,462   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |
|                               |   | 1,666   | 0.95                       | 05/20/19               |  |   |
| Adrian Corless . . . . .      | 30,000  |   | 3.24                       | 04/04/17               | 267,469  | 98,964  |
|                               | 27,000  |   | 2.42                       | 07/30/18               |  |   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |
|                               |   | 1,666   | 0.95                       | 05/20/19               |  |   |
| Mark A. Sperry . . . . .      | 35,027  |   | 8.53                       | 11/14/11               |  |   |
|                               | 20,000  |   | 9.20                       | 02/10/14               |  |   |
|                               | 25,000  |   | 5.39                       | 01/28/15               |  |   |
|                               | 40,000  |   | 5.58                       | 02/01/16               |  |   |
|                               | 40,000  |   | 3.75                       | 02/14/17               |  |   |
|                               | 27,000  |   | 2.60                       | 01/24/18               |  |   |
|                               | 834   |   | 0.95                       | 05/20/19               |  |   |

- (1) This column represents the number of shares that have not yet vested, and have not yet been earned. The number of shares is based on achieving threshold performance of goals.
- (2) This column represents the market value of the unearned restricted stock awards using the stock price at the end of fiscal year 2010.

## **OPTION EXERCISES AND STOCK VESTED IN FISCAL 2010 TABLE**

There were no option exercises or stock awards vested during the year for the named executive officers.

## **POTENTIAL PAYMENTS UPON TERMINATION OR CHANGE-IN-CONTROL**

The Company and Messrs. Marsh, Anderson, Conway, Hansen and Corless are parties to employment agreements, respectively, that provide for a potential payment upon termination for other than “Cause” as discussed above in *Employment Agreements*.

Such payments by the Company to any of Messrs. Marsh, Anderson, Conway, Hansen, or Corless are subject to the executive signing a general release of claims in a form and manner satisfactory to the Company and in no event is the executive entitled to receive any such payment after he breaches the Employee Patent, Confidential Information and Non-Compete Agreement referenced in the executive’s respective agreement or any non-compete, non-solicit or non-disclosure covenants in any agreement between the Company and such executive. We agreed to provide severance payments to such executives in these circumstances based on our negotiations with each of our executives at the time they joined our Company, or as negotiated subsequent to hiring, and in order to provide a total compensation package that we believed to be competitive. Additionally, we believe that providing severance upon a termination without cause can help to encourage our executives to take the risks that we believe are necessary for our Company to succeed and also recognizes the longer hiring process typically involved in hiring a senior executive.

“Cause” shall mean (i) a willful act of dishonesty by the Executive with respect to any matter involving the Company or any subsidiary or affiliate, or (ii) conviction of the Executive of a crime involving moral turpitude, (iii) the failure to perform to the reasonable satisfaction of the Board a substantial portion of the Executive’s duties and responsibilities assigned or delegated under this Agreement (other than any such failure after the Executive gives notice of termination for “Good Reason”), which failure continues, in the reasonable judgment of the Board, after written notice given to the Executive by the Board. For purposes of this definition (i) hereof, no act, or failure to act, on the Executive’s part shall be deemed “willful” unless done, or omitted to be done, by the Executive without reasonable belief that the Executive’s act, or failure to act, was in the best interests of the Company and its subsidiaries and affiliates. “Cause” may also include (i) the failure or refusal of the named executive to render services to us in accordance with his obligations under the employment agreement or a determination by us that the named executive has failed to perform the duties of his employment; (ii) disloyalty, gross negligence, dishonesty, breach of fiduciary duty or breach of the terms of the employment agreement or the other agreements executed in connection therewith; (iii) the commission by the named executive of an act of fraud, embezzlement or disregard of our rules or policies or the commission by the named executive of any other action which injures us; (iv) acts which, in the judgment of our board of directors, would tend to generate adverse publicity toward us; (v) the commission, or plea of nolo contendere, by the named executive of a felony; (vi) the commission of an act which constitutes unfair competition with us or which induces any of our customers to breach a contract with us; or (vii) a breach by the named executive of the terms of the non-competition and non-solicitation agreement or the employee nondisclosure and developments agreement between us and the named executive.

“Terminating Event” shall mean a termination by the Company of the employment of the Executive with the Company for any reason other than (i) a willful act of dishonesty by the Executive with respect to any matter involving the Company or any subsidiary or affiliate, or (ii) conviction of the Executive of a crime involving moral turpitude, or (iii) the gross or willful failure by the Executive to substantially perform the Executive’s duties with the Company, which failure is not cured within thirty (30) days after a written demand for substantial performance is received by the Executive from the Board of Directors of the Company (the “Board”) which specifically identifies the manner in which the Board believes the Executive has not substantially performed the Executive’s duties, or (iv) the failure by the Executive to perform his full-time duties with the Company by reason of his death or Disability. For purposes of clauses (i) and (iii) of this Section I(a), no act, or failure to act, on the Executive’s part shall be deemed “willful” unless done, or omitted to be done, by the Executive without reasonable belief that the Executive’s act, or failure to act, was in the best interests of the Company and its subsidiaries and affiliates. For purposes of this Agreement, “Disability” shall mean the Executive’s incapacity due to physical or mental illness which has caused the Executive to be absent from the full-time performance of his duties with the Company for a period of six (6) consecutive months if the Company shall have given the Executive a Notice of Termination and, within thirty (30) days after such Notice of Termination is given, the Executive shall not have returned to the full-time performance of his duties.

If Mr. Marsh had been terminated without cause on December 31, 2010, the approximate value of the severance package, including, as mentioned above in *Employment Agreements*, salary, benefits and equity awards, under his employment agreement would have been \$466,792. This includes an acceleration of any remaining unvested options granted to such named executive under the 1999 Stock Option and Incentive Plan. If Mr. Anderson, Conway, Hansen or Corless had been terminated without cause on December 31, 2010, the approximate value of the severance packages, including, as mentioned above in *Employment Agreements*, salary, benefits and equity awards, under the employment agreement for such named executive would have been for Mr. Anderson \$366,090, for Mr. Conway \$261,934, for Mr. Hansen \$293,147 and Mr. Corless \$293,504.

Mr. Sperry was formerly a party to an employment agreement with the Company that provided for a payment upon termination for other than "Cause." On August 27, 2010, Mr. Sperry's position was eliminated and he subsequently stepped down from his position as Senior Vice President and General Manger of the Company's Continuous Power Division. In accordance with the terms of his employment agreement, the Company made a severance payment to Mr. Sperry in the amount of \$258,000.

The Company and Messrs. Marsh, Anderson, Conway, Hansen, and Corless are parties to employment agreements, respectively, that provide for a potential payment upon a "Change of Control", as discussed above in *Employment Agreements*. Such payments by the Company to the executive are subject to the executive signing a general release of claims in a form and manner satisfactory to the Company and in no event is Messrs. Marsh, Anderson, Conway, Hansen or Corless entitled to receive any such payment after he breaches the Employee Patent, Confidential Information and Non-Compete Agreement referenced in the executives respective agreement or any non-compete, non-solicit or non-disclosure covenants in any agreement between the Company and such executive.

"Change in Control" shall be deemed to have occurred in any one of the following events:

- (i) any "person," as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), (other than the Company, any of its subsidiaries, any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries, OGK-3, together with all Affiliates and Associates (as such terms are hereinafter defined) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing 25% or more of the then outstanding shares of common stock of the Company (the "Stock") (other than as a result of an acquisition of securities directly from the Company); or
- (ii) persons who, as of the effective date of this Agreement (the "Effective Date"), constitute the Company's Board of Directors (the "Incumbent Directors") cease for any reason, including, without limitation, as a result of a tender offer, proxy contest, merger or similar transaction, to constitute at least a majority of the Board, provided that any person becoming a director of the Company subsequent to the Effective Date shall be considered an Incumbent Director if such person's election was approved by or such person was nominated for election by either (A) a vote of at least a majority of the Incumbent Directors or (B) a vote of at least a majority of the Incumbent Directors who are members of a nominating committee comprised, in the majority, of Incumbent Directors; but provided further, that any such person whose initial assumption of office is in connection with an actual or threatened election contest relating to the election of members of the Board of Directors or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board, including by reason of agreement intended to avoid or settle any such actual or threatened contest or solicitation, shall not be considered an Incumbent Director; or
- (iii) Upon (A) the consummation of any consolidation or merger of the Company where the shareholders of the Company, immediately prior to the consolidation or merger, did not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 of the Exchange Act), directly or indirectly, shares representing in the aggregate more than 50% of the voting shares of the corporation issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), (B) the consummation of any sale, lease, exchange or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company or (C) the completion of a liquidation or dissolution that has been approved by the stockholders of the Company; or

- (iv) OGK-3, together with all Affiliates and Associates (as such terms are hereinafter defined) of such person, shall become the “beneficial owner” (as such term is defined in Rule 13d-3 of the Exchange Act), directly or indirectly, of securities of the Company representing 50% or more of the then outstanding Stock (other than as a result of an acquisition of securities directly from the Company).

For purposes of this Agreement, “Affiliate” and “Associate” shall have the respective meanings ascribed to such terms in Rule 12b-2 of the Exchange Act, as in effect on the date of this Agreement; provided, however, that no person who is a director or officer of the Company shall be deemed an Affiliate or an Associate of any other director or officer of the Company solely as a result of his position as director or officer of the Company.

Notwithstanding the foregoing, a “Change in Control” shall not be deemed to have occurred for purposes of the foregoing clauses (i) or (iv) solely as the result of an acquisition of securities by the Company which, by reducing the number of shares of Stock outstanding, increases the proportionate number of shares of Stock beneficially owned by any person to 25% or more (or 50% or more in the case of clause (iv)) of the shares of Stock then outstanding; provided, however, that if any such person shall at any time following such acquisition of securities by the Company become the beneficial owner of any additional shares of Stock (other than pursuant to a stock split, stock dividend, or similar transaction) and such person immediately thereafter is the beneficial owner of 25% or more (or 50% or more in the case of clause (iv)) of the shares of Stock then outstanding, then a “Change in Control” shall be deemed to have occurred for purposes of the foregoing clause (i) or (iv), as applicable.

“Change-in-control” may also generally mean any of the following: (1) a sale or other disposition of all or substantially all of our assets; or (2) a merger or consolidation after which our voting securities outstanding immediately before the transaction cease to represent at least a majority of the combined voting power of the successor entity’s outstanding voting securities immediately after the transaction. We agreed to provide payments to these executives in these circumstances in order to provide a total compensation package that we believed to be competitive. Additionally, the primary purpose of our equity-based incentive awards is to align the interests of our executives and our stockholders and provide our executives with strong incentives to increase stockholder value over time. As change-in-control transactions typically represent events where our stockholders are realizing the value of their equity interests in our Company, we believe it is appropriate for our executives to share in this realization of stockholder value, particularly where their employment is terminated in connection with the change-in-control transaction. We believe that this will also help to better align the interests of our executives with our stockholders in pursuing and engaging in these transactions.

If a change-in-control had occurred on December 31, 2010 and on that date Messrs. Marsh, Anderson, Conway, Hansen or Corless had been terminated without Cause, experienced a material negative change in his or her compensation or responsibilities or was required to be based at a location more than fifty (50) miles from his or her current work location, the value of the change-of-control provisions, including, as mentioned above, salary, benefits, vested equity awards and expected bonus, under the employment or executive severance agreements for each such named executive would have been as follows: Mr. Marsh \$1,386,646, Mr. Anderson \$365,975, Mr. Conway \$251,893, Mr. Hansen \$280,074 and Mr. Corless \$281,100.

*The following Report of the Compensation Committee of the Board of Directors on Executive Compensation will not be deemed incorporated by reference by any general statement incorporating by reference this Annual Report on Form 10-K into any of the Company’s filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates this information by reference, and will not otherwise be deemed filed under such Acts.*

## **COMPENSATION COMMITTEE REPORT**

The Compensation Committee reviews and evaluates individual executive officers and determines the compensation for each executive officer (See the section entitled “*Executive Compensation*”). The Compensation Committee also oversees management’s decisions concerning the performance and compensation of other Company officers, administers the Company’s incentive compensation and other stock-based plans, evaluates the effectiveness of its overall compensation programs, including oversight of the Company’s benefit, perquisite and employee equity programs, and reviews the Company’s management succession plans. A more complete description of the Compensation Committee’s functions is set forth in the Compensation Committee’s charter which is published on the “Investors” section of the Company’s website at [www.plugpower.com](http://www.plugpower.com). Each member of the Compensation Committee is an independent director as defined in the NASDAQ Rules.



In general, the Compensation Committee designs compensation to attract, retain and motivate a superior executive team, reward individual performance, relate compensation to Company goals and objectives and align the interests of the executive officers with those of the Company's stockholders. We rely upon our judgment about each individual—and not on rigid guidelines or formulas, or short-term changes in business performance—in determining the amount and mix of compensation elements for each senior executive officer. Key factors affecting our judgments include: the executive's performance compared to the goals and objectives established for the executive at the beginning of the year; the nature, scope and level of the executive's responsibilities; the executive's contribution to the Company's financial results; the executive's effectiveness in leading the Company's initiatives to increase customer value, productivity and revenue growth; and the executive's contribution to the Company's commitment to corporate responsibility, including the executive's success in creating a culture of unyielding integrity and compliance with applicable law and the Company's ethics policies.

The Compensation Committee has reviewed the Compensation Discussion and Analysis and discussed that analysis with Management. Based on its review and discussions with Management, the Compensation Committee recommended to our Board of Directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for 2010 and the Company's 2011 Proxy statement. This report on executive compensation for Fiscal 2009 is provided by the undersigned members of the Compensation Committee of the Board of Directors.

Gary K. Willis (Chairman)  
George C. McNamee

#### COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During Fiscal 2010, Messrs. Willis (Chairman) and McNamee served as members of the Compensation Committee. None of them had any relationship with the Company requiring disclosure under applicable rules and regulations of the SEC.

#### DIRECTOR COMPENSATION

The Compensation Committee periodically reviews the Company's Non-Employee Director Compensation Plan (the "Plan") to ensure that the compensation aligns the directors' interests with the long-term interests of the stockholders and that the structure of the compensation is simple, transparent and easy for stockholders to understand. The Compensation Committee also considers whether the Plan fairly compensates the Company's directors when considering the work required in a company of the size and scope of the Company. Employee directors do not receive additional compensation for their services as directors. The following is a summary of the Plan:

Pursuant to the current form of the Plan, upon initial election or appointment to the Board of Directors, new non-employee directors receive non-qualified stock options to purchase 125,000 shares (50,000 shares for any new non-employee Chairman) of Common Stock with an exercise price equal to fair market value on the date of grant and that are fully vested on the first anniversary of the date of the grant. Each year of a non-employee director's tenure, the director will receive non-qualified options to purchase 10,000 shares (15,000 shares for any non-employee Chairman), plus non-qualified options to purchase an additional 5,000 shares for serving as chairman of the Audit Committee and non-qualified options to purchase an additional 2,000 shares for serving as chairman of any other committee, including the Compensation Committee and the Corporate Governance and Nominating Committee. These annual options, with an exercise price equal to fair market value on the grant date, fully vest on the first anniversary of the date of the grant.

In addition, under the current form of the Plan each non-employee director is paid an annual retainer of \$30,000 (\$85,000 for any non-employee Chairman) for their services. Committee members receive additional annual retainers in accordance with the following table:

| Committee   | Non-Employee<br>Chairman | Non-Employee<br>Director |
|---|--------------------------|--------------------------|
| Audit Committee . . . . .                               | \$20,000                 | \$15,000                 |
| Compensation Committee . . . . .                        | 15,000                   | 5,000                    |
| Corporate Governance and Nominating Committee . . . . . | 10,000                   | 5,000                    |

These additional payments for service on a committee are due to the workload and broad-based responsibilities of the committees. The total amount of the annual retainers are paid in a combination of fifty percent (50%) cash and fifty percent (50%) Common Stock, with an option to receive up to one hundred percent (100%) Common Stock, at the election of the non-employee director. At the Board's discretion, directors may receive a greater portion of the foregoing amounts, up to eighty percent (80%), in cash. All such stock shall be fully vested at the time of issuance and is valued at its fair market value on the date of issuance. Non-employee directors are also reimbursed for their direct expenses associated with their attendance at board meetings.

#### NON-EMPLOYEE DIRECTOR COMPENSATION TABLE

The following table provides information for non-employee directors who served during Fiscal 2010.

| Name               | Fees Earned or<br>Paid in Cash<br>(\$) | Stock<br>Awards (1)<br>(\$) | Option<br>Awards (2)<br>(\$) | Total<br>(\$) |
|--------------------|--|-----------------------------|------------------------------|---------------|
| Gary Willis        | 30,000                                 | 30,000                      | 4,440                        | 64,440        |
| George McNamee     | 76,000                                 | 19,000                      | 5,550                        | 100,550       |
| Jeffrey Drazan (3) | 13,743                                 | 13,743                      | 3,700                        | 31,186        |
| Larry Garberding   | 27,500                                 | 27,500                      | 5,550                        | 60,550        |
| Maureen Helmer     | 27,500                                 | 27,500                      | 4,440                        | 59,440        |

(1) This column represents the dollar amount recognized for financial statement reporting purposes with respect to the 2010 fiscal year for the fair value of restricted stock earned in 2010. Fair value is calculated using the closing price of Plug Power stock on the date of grant. Stock awards granted to directors vest immediately. For additional information, refer to note 14 of the Company's consolidated financial statements in the Form 10-K for the year ended December 31, 2010, as filed with the SEC.

- a. Gary Willis has no unexercised stock awards. Stock awards earned by Mr. Willis in 2010 include 11,364 shares granted on April 1, 2010 with a grant date fair value of \$0.66, 17,857 shares granted on July 1, 2010 with a grant date fair value of \$0.42, 19,231 shares granted on October 1, 2010 with a grant date fair value of \$0.39, and 19,231 shares granted on January 3, 2011 with a grant date fair value of \$0.39.
- b. George McNamee has no unexercised stock awards. Stock awards earned by Mr. McNamee in 2010 include 7,197 shares granted on April 1, 2010 with a grant date fair value of \$0.66, 11,310 shares granted on July 1, 2010 with a grant date fair value of \$0.42, 12,179 shares granted on October 1, 2010 with a grant date fair value of \$0.39, and 12,179 shares granted on January 3, 2011 with a grant date fair value of \$0.39.
- c. Jeffrey Drazan has no unexercised stock awards. Stock awards earned by Mr. Drazan in 2010 include 6,629 shares granted on April 1, 2010 with a grant date fair value of \$0.66, 10,417 shares granted on July 1, 2010 with a grant date fair value of \$0.42, 11,218 shares granted on October 1, 2010 with a grant date fair value of \$0.39, and 1,585 shares granted on January 3, 2011 with a grant date fair value of \$0.39.
- d. Larry Garberding has no unexercised stock awards. Stock awards earned by Mr. Garberding in 2010 include 10,417 shares granted on April 1, 2010 with a grant date fair value of \$0.66, 16,369 shares granted on July 1, 2010 with a grant date fair value of \$0.42, 17,628 shares granted on October 1, 2010 with a grant date fair value of \$0.39, and 17,628 shares granted on January 3, 2011 with a grant date fair value of \$0.39.
- e. Maureen Helmer has no unexercised stock awards. Stock awards earned by Ms. Helmer in 2010 include 10,417 shares granted on April 1, 2010 with a grant date fair value of \$0.66, 16,369 shares granted on July 1, 2010 with a grant date fair value of \$0.42, 17,628 shares granted on October 1, 2010 with a grant date fair value of \$0.39, and 17,628 shares granted on January 3, 2011 with a grant date fair value of \$0.39.

- (2) This column represents the dollar amount recognized for financial statement reporting purposes with respect to the 2010 fiscal year for the fair value of stock options granted to each of the named Non-Employee Directors in 2010 as well as prior fiscal years, in accordance with Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718. Pursuant to SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. For additional information on the valuation assumptions with respect to the 2010 grants, refer to note 14 of the Company's consolidated financial statements in the Form 10-K for the year ended December 31, 2010, as filed with the SEC. Also see note 14 for information on the valuation assumptions with respect to grants made prior to 2010. *These amounts reflect the Company's accounting expense for these awards, and do not correspond to the actual value that will be recognized by the directors.* As of December 31, 2010:
- Gary Willis has 235,245 unexercised option awards including 95,337 unvested awards. Option awards for 2010 include 12,000 shares granted on May 19, 2010 with a grant date fair value of \$0.37.
  - George McNamee has 410,000 unexercised option awards including 98,337 unvested awards. Option awards for 2010 include 15,000 shares granted on May 19, 2010 with a grant date fair value of \$0.37.
  - Jeffrey Drazan has 145,000 unexercised option awards including 10,000 unvested awards. Option awards for 2010 include 10,000 shares granted on May 19, 2010 with a grant date fair value of \$0.37.
  - Larry Garberding has 275,000 unexercised option awards including 98,337 unvested awards. Option awards for 2010 include 15,000 shares granted on May 19, 2010 with a grant date fair value of \$0.37.
  - Maureen Helmer has no 220,000 unexercised option awards including 95,337 unvested awards. Option awards for 2010 include 12,000 shares granted on May 19, 2010 with a grant date fair value of \$0.37.
- (3) Jeffrey Drazan resigned from the Company's Board of Directors as of October 2010.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth information regarding the beneficial ownership of Common Stock as of March 29, 2011 (except as otherwise indicated) by:

- all persons known by us to have beneficially owned 5% or more of the Common Stock;
- each director of the Company;
- the named executive officers; and
- all directors and executive officers as a group.

The beneficial ownership of the stockholders listed below is based on publicly available information and from representations of such stockholders.

| Name and Address of Beneficial Owner (1)                     | Shares Beneficially Owned (2) |                |
|--|-------------------------------|----------------|
|  | Number                        | Percentage (%) |
| OJSC OJK-3 (3)   | 44,626,939.00                 | 33.7%          |
| George C. McNamee (4)  | 858,044                       | *              |
| Andrew Marsh (5)   | 628,729                       | *              |
| Larry G. Garberding (6)                                      | 376,111                       | *              |
| Gary K. Willis (7)   | 329,317                       | *              |
| Maureen O. Helmer (8)  | 307,720                       | *              |
| Gerald A. Anderson (9)                                       | 251,012                       | *              |
| Gerard L. Conway, Jr. (10)                                   | 226,824                       | *              |
| Adrian Corless (11)  | 162,396                       | *              |
| Erik J. Hansen (12)  | 136,454                       | *              |
| All executive officers and directors as a group (10 persons) | 3,276,607                     | 2.5%           |

<sup>1</sup> For purposes of this policy, a person's immediate family should include such person's child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law or any other person (other than a tenant or employee) sharing the household of such person.

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\* Represents less than 1% of the outstanding shares of Common Stock

- 1) The address for OJSC OJK-3 is Ermolayevsky pereulok, 25, 123001, Moscow, Russia. Unless otherwise indicated, all other addresses for Beneficial Owners is c/o Plug Power Inc., 968 Albany Shaker Road, Latham, New York 12110.
- 2) The number of shares beneficially owned by each stockholder is determined under rules promulgated by the SEC and includes voting or investment power with respect to securities. Under Rule 13d-3 under the Securities Exchange Act of 1934, as amended, beneficial ownership includes any shares to which the individual or entity has sole or shared voting power or investment power and includes any shares as to which the individual or entity has the right to acquire beneficial ownership within 60 days of March 29, 2011, through the exercise of any warrant, stock option or other right. The inclusion in this Annual Report on Form 10-K of such shares, however, does not constitute an admission that the named stockholder is a direct or indirect beneficial owner of such shares. The number of shares of Common Stock outstanding used in calculating the percentage for each listed person includes the shares of Common Stock underlying options, warrants or other rights held by such person that are exercisable within 60 days of March 29, 2011 but excludes shares of Common Stock underlying options, warrants or other rights held by any other person. Percentage of beneficial ownership is based on 132,434,673 shares of Common Stock outstanding as of March 23, 2011. Unless otherwise indicated, each of the stockholders has sole voting and investment power with respect to the shares of Common Stock beneficially owned by the stockholder.
- 3) Under an Investor Rights Agreement dated as of June 29, 2006, as amended, until June 29, 2011, OGK-3 is prohibited from taking certain actions to influence or obtain control of the Company, including but not limited to acquiring additional shares of common stock and making shareholder proposals or director nominations. In a Form 3 filed with the SEC on March 29, 2011, INTER RAO UES reported that it directly owns 81.9% of OGK-3. By virtue of its ownership interest in OGK-3, INTER RAO UES could be deemed to have the power to vote, or direct the voting of, and the power to dispose, or direct the disposition of, the shares of Common Stock held by OGK-3, and as such could be deemed the beneficial owner of such shares of Common Stock.
- 4) Includes 353,325 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$3.81.
- 5) Includes 401,667 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$3.57.
- 6) Includes 218,325 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$4.85.
- 7) Includes 181,570 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$2.86.
- 8) Includes 166,325 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$3.00.
- 9) Includes 73,667 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$3.01.
- 10) Includes 112,788 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$4.48.
- 11) Includes 58,667 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$2.80.
- 12) Includes 51,667 shares of Common Stock issuable upon exercise of outstanding options at a weighted average exercise price of \$0.86.

## 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, 2010.

### Equity Compensation Plan Information

| Plan Category  | Number of shares to be issued upon exercise of outstanding options, warrants and rights<br>(a) | Weighted average exercise price of outstanding options, warrants and rights<br>(b) | Number of shares remaining available for future issuance under equity compensation plans (excluding shares reflected in column (a))<br>(c) |
|--|--|--|--|
| Equity compensation plans approved by security holders .....     | 8,842,774(1)   | \$2.19   | 6,699,873(2)   |
| Equity compensation plans not approved by security holders ..... | —  | —  | —  |
| Total .....  | <u>8,842,774</u>   | <u>\$2.19</u>  | <u>6,699,873</u>   |

- (1) Represents 4,463,251 outstanding options and 4,379,523 shares of unvested restricted stock issued under the 1999 Stock Option Plan.
- (2) Includes 6,610,547 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, 2011, the maximum number of shares remaining available for future issuance under the 1999 Stock Option Plan is 6,714,127.

### ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

There are no related party transactions to disclose. The Company's Board of Directors adopted a related party transaction policy in October of 2006. This policy requires that the Company's General Counsel, together with outside counsel as necessary, evaluate potential transaction before the Company enters into any agreements with a related party. Certain transactions may require the Board of Directors' and its Audit Committee's approval. The policy defines a "related party" as: (i) the Company's directors or executive officers, (ii) the Company's director nominees, (iii) security holders known to Plug Power to beneficially own more than 5% of any class of Plug Power's voting securities, or (iv) the immediate family members<sup>1</sup> of any of the persons listed in items (i) – (iii).

<sup>1</sup> For purposes of this policy, a person's immediate family should include such person's child, stepchild, parent, stepparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law or any other person (other than a tenant or employee) sharing the household of such person.



#### ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table presents fees for professional services rendered by KPMG for the audit of the Company's annual financial statements and fees billed for other services rendered by KPMG:

|                              | KPMG      |           |
|------------------------------|-----------|-----------|
|                              | 2010      | 2009      |
| Audit Fees . . . . .         | \$563,000 | \$473,000 |
| Audit-Related Fees . . . . . | 19,300    | 49,900    |
| Tax Fees . . . . .           | —         | 50,000    |
| All Other Fees . . . . .     | —         | —         |
| Total . . . . .              | \$582,300 | \$572,900 |

In the above table, and in accordance with SEC definitions and rules: (1) "audit fees" are fees for professional services for the audit of the Company's consolidated financial statements included in Form 10-K, review of unaudited interim consolidated financial statements included in Form 10-Qs, testing of the effectiveness of internal control on financial reporting, or for services that are normally provided by the accountant in connection with statutory and regulatory filings or engagements; (2) "audit-related fees" are fees for assurance and related services that are reasonably related to the performance of the audit or review of the Company's consolidated financial statements; (3) "tax fees" are fees for tax compliance, tax advice, and tax planning; and (4) "all other fees" are fees for any services not included in the first three categories.

Under the Audit Committee's charter, the Audit Committee is authorized to delegate to one or more of its members the authority to pre-approve audit and non-audit services. All fees listed in the above table were approved using pre-approval procedures. The Audit Committee has not delegated its pre-approval authority. The Audit Committee approved all audit and non-audit services provided to the Company by KPMG during Fiscal 2010.

#### 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.

## 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.

PLUG POWER INC.

By: /s/ ANDREW MARSH

ANDREW MARSH,

*President, Chief Executive Officer and Director*

Date: March 31, 2011

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.

| <u>Signature</u>                                      | <u>Title</u>   | <u>Date</u>    |
|---|--|----------------|
| <u>/s/ ANDREW MARSH</u><br>ANDREW MARSH               | <i>President, Chief Executive Officer and<br/>Director (Principal Executive Officer)</i> | March 31, 2011 |
| <u>/s/ GERALD A. ANDERSON</u><br>GERALD A. ANDERSON   | <i>Chief Financial Officer (Principal<br/>Financial Officer)</i>                         | March 31, 2011 |
| <u>/s/ LARRY G. GARBERDING</u><br>LARRY G. GARBERDING | <i>Director</i>  | March 31, 2011 |
| <u>/s/ MAUREEN O. HELMER</u><br>MAUREEN O. HELMER     | <i>Director</i>  | March 31, 2011 |
| <u>/s/ GEORGE C. McNAMEE</u><br>GEORGE C. McNAMEE     | <i>Director</i>  | March 31, 2011 |
| <u>/s/ GARY K. WILLIS</u><br>GARY K. WILLIS           | <i>Director</i>  | March 31, 2011 |

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 10.25 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)
- 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 October 28, 2009, by and between Erik J. Hansen and Plug Power Inc.(12)
- 10.24 Executive Employment Agreement, dated as of February 9, 2010, by and between Adrian Corless and Plug Power Inc.(12)
- 10.25 Form of Restricted Stock Unit Award Agreement for Employees.(13)
- 23.1 Consent of KPMG LLP.(14)
- 31.1 and 31.2 Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.(14)
- 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.(14)

- 
- (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) Incorporated by reference to the Company's Form 10-K for the period ended December 31, 2009.
  - (14) Filed herewith.

## INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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## 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 (the Company) as of December 31, 2010 and 2009, 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, 2010. 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 as of December 31, 2010 and 2009, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2010, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 19 to the consolidated financial statements, the Company has changed its method of accounting for revenue arrangements with multiple-deliverables entered into or substantially modified after January 1, 2010 to adopt Accounting Standards Update No. 2009-13 on Topic 605, *Revenue Recognition Multiple Deliverable Revenue Arrangements*.

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, 2010, 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 31, 2011, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/S/ KPMG LLP

Albany, New York  
March 31, 2011

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders  
Plug Power Inc.:

We have audited Plug Power Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2010, 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 maintained, in all material respects, effective internal control over financial reporting as of December 31, 2010, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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, 2010 and 2009, 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, 2010, and our report dated March 31, 2011 expressed an unqualified opinion on those consolidated financial statements.

As discussed in Note 19 to the consolidated financial statements, the Company has changed its method of accounting for revenue arrangements with multiple-deliverables entered into or substantially modified after January 1, 2010 to adopt Accounting Standards Update No. 2009-13 on Topic 605, *Revenue Recognition-Multiple Deliverable Revenue Arrangements*.

/S/ KPMG LLP

Albany, New York  
March 31, 2011

**PLUG POWER INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**

|  | <b>December 31,<br/>2010</b> | <b>December 31,<br/>2009</b> |
|--|------------------------------|------------------------------|
| <b>Assets</b>  |                              |                              |
| Current assets:  |                              |                              |
| Cash and cash equivalents . . . . .  | \$ 10,955,403                | \$ 14,580,983                |
| Trading securities - auction rate debt securities . . . . .  | —                            | 53,397,179                   |
| Available-for-sale securities . . . . .  | 10,403,315                   | 47,959,920                   |
| Accounts receivable, less allowance of \$10,160 in 2010<br>and \$92,560 in 2009 . . . . .                                    | 4,196,361                    | 2,004,670                    |
| Inventory . . . . .  | 10,539,116                   | 6,360,755                    |
| Assets held for sale . . . . .   | 1,000,000                    | —                            |
| Auction rate debt securities repurchase agreement . . . . .  | —                            | 5,977,822                    |
| Prepaid expenses and other current assets . . . . .  | 1,584,466                    | 3,217,446                    |
| Total current assets . . . . .   | 38,678,661                   | 133,498,775                  |
| Restricted cash . . . . .  | 525,000                      | 2,265,405                    |
| Property, plant and equipment, net . . . . .   | 9,838,631                    | 14,342,740                   |
| Investment in leased property, net . . . . .   | 263,239                      | 2,255,772                    |
| Intangible assets, net . . . . .   | 9,871,394                    | 11,821,830                   |
| Total assets . . . . .   | \$ 59,176,925                | \$ 164,184,522               |
| <b>Liabilities and Stockholders' Equity</b>  |                              |                              |
| Current liabilities:   |                              |                              |
| Accounts payable . . . . .   | \$ 3,560,048                 | \$ 2,877,270                 |
| Accrued expenses . . . . .   | 4,336,229                    | 5,847,541                    |
| Product warranty reserve . . . . .   | 862,480                      | —                            |
| Borrowings under line of credit . . . . .  | —                            | 59,375,000                   |
| Current portion long term debt . . . . .   | 9,956                        | 413,708                      |
| Deferred revenue . . . . .   | 4,349,749                    | 4,596,717                    |
| Other current liabilities . . . . .  | 1,901,372                    | 379,584                      |
| Total current liabilities . . . . .  | 15,019,834                   | 73,489,820                   |
| Long term debt . . . . .   | —                            | 1,150,408                    |
| Other liabilities . . . . .  | 1,243,728                    | 1,275,541                    |
| Total liabilities . . . . .  | 16,263,562                   | 75,915,769                   |
| Stockholders' equity:  |                              |                              |
| Common stock, \$0.01 par value per share; 245,000,000 shares authorized;<br>Issued (including shares in treasury):           |                              |                              |
| 133,699,235 at December 31, 2010 and 130,591,236 at<br>December 31, 2009 . . . . .   | 1,336,992                    | 1,305,913                    |
| Additional paid-in capital . . . . .   | 769,659,871                  | 767,808,572                  |
| Accumulated other comprehensive income . . . . .   | 965,868                      | 803,209                      |
| Accumulated deficit . . . . .  | (727,329,858)                | (680,370,937)                |
| Less common stock in treasury:<br>1,804,487 shares at December 31, 2010 and 986,199 shares at<br>December 31, 2009 . . . . . | (1,719,510)                  | (1,278,004)                  |
| Total stockholders' equity . . . . .   | 42,913,363                   | 88,268,753                   |
| Total liabilities and stockholders' equity . . . . .   | \$ 59,176,925                | \$ 164,184,522               |

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

**PLUG POWER INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

**For the years ended December 31, 2010, 2009 and 2008**

|   | <u>December 31,</u><br><u>2010</u> | <u>December 31,</u><br><u>2009</u> | <u>December 31,</u><br><u>2008</u> |
|---|------------------------------------|------------------------------------|------------------------------------|
| Product and service revenue . . . . .   | \$ 15,738,841                      | \$ 4,832,773                       | \$ 4,667,295                       |
| Research and development contract revenue . . . . .   | 3,597,870                          | 7,459,783                          | 13,234,022                         |
| Licensed technology revenue . . . . .   | 135,938                            | —                                  | —                                  |
| Total revenue . . . . .   | <u>19,472,649</u>                  | <u>12,292,556</u>                  | <u>17,901,317</u>                  |
| Cost of product and service revenue . . . . .   | 23,111,151                         | 7,246,453                          | 11,442,232                         |
| Cost of research and development contract revenue . . . . .   | 6,370,797                          | 12,433,361                         | 21,504,926                         |
| Research and development expense . . . . .  | 12,901,170                         | 16,324,373                         | 34,987,207                         |
| Selling, general and administrative expenses . . . . .  | 25,572,364                         | 15,426,806                         | 28,333,151                         |
| Gain on sale of assets . . . . .  | (3,217,594)                        | —                                  | —                                  |
| Goodwill impairment . . . . .   | —                                  | —                                  | 45,842,656                         |
| Amortization of intangible assets . . . . .   | <u>2,263,627</u>                   | <u>2,132,333</u>                   | <u>2,224,954</u>                   |
| Operating loss . . . . .  | <u>(47,528,866)</u>                | <u>(41,270,770)</u>                | <u>(126,433,809)</u>               |
| Interest and other income and net realized gains<br>(losses) from available-for-sale securities . . . . . | 1,056,932                          | 1,689,299                          | 5,134,442                          |
| Change in fair value of auction rate securities repurchase<br>agreement . . . . .                         | (5,977,822)                        | (4,246,524)                        | 10,224,346                         |
| Net trading gain . . . . .  | 5,977,822                          | 4,246,524                          | —                                  |
| Impairment loss on available-for-sale securities . . . . .  | —                                  | —                                  | (10,224,346)                       |
| Interest and other expense . . . . .  | <u>(486,987)</u>                   | <u>(1,127,081)</u>                 | <u>(400,657)</u>                   |
| Net loss . . . . .  | <u><u>\$(46,958,921)</u></u>       | <u><u>\$(40,708,552)</u></u>       | <u><u>\$(121,700,024)</u></u>      |
| Loss per share:   |                                    |                                    |                                    |
| Basic and diluted . . . . .   | <u>\$ (0.36)</u>                   | <u>\$ (0.32)</u>                   | <u>\$ (1.36)</u>                   |
| Weighted average number of common shares outstanding . . . . .  | <u>131,231,619</u>                 | <u>129,110,661</u>                 | <u>89,383,480</u>                  |

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

**PLUG POWER INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

**For the years ended December 31, 2010, 2009 and 2008**

|   | Twelve months ended<br>December 31, |                      |                      |
|---|-------------------------------------|----------------------|----------------------|
|   | 2010                                | 2009                 | 2008                 |
| <b>Cash Flows From Operating Activities:</b>                                    |                                     |                      |                      |
| Net loss  | \$(46,958,921)                      | \$ (40,708,552)      | \$(121,700,024)      |
| Adjustments to reconcile net loss to net cash used in operating activities:     |                                     |                      |                      |
| Depreciation of property, plant and equipment and investment in leased property | 4,969,263                           | 3,634,668            | 4,398,147            |
| Amortization of intangible assets   | 2,263,627                           | 2,132,333            | 2,224,954            |
| Loss (gain) on disposal of property, plant and equipment                        | 86,794                              | 504,397              | (2,701)              |
| Stock-based compensation  | 1,174,576                           | 1,928,501            | 8,590,573            |
| Provision for bad debts   | 10,160                              | 92,560               | 75,148               |
| Loss on sale of leased assets   | 290,491                             | —                    | —                    |
| Goodwill impairment charge  | —                                   | —                    | 45,842,656           |
| Impairment loss on available-for-sale securities                                | —                                   | —                    | 10,224,346           |
| Net unrealized gains on trading securities                                      | (5,977,822)                         | (4,246,524)          | —                    |
| Change in fair value of auction rate debt securities repurchase agreement       | 5,977,822                           | 4,246,524            | (10,224,346)         |
| Gain on repayable government assistance   | —                                   | (324,300)            | (1,232,522)          |
| Changes in assets and liabilities:  |                                     |                      |                      |
| Accounts receivable   | (2,193,325)                         | 65,440               | 2,281,723            |
| Inventory   | (4,409,582)                         | (95,935)             | (521,253)            |
| Prepaid expenses and other current assets                                       | 1,624,422                           | (684,277)            | 256,448              |
| Accounts payable and accrued expenses   | 2,618,994                           | (3,944,407)          | 1,103,013            |
| Deferred revenue  | (246,968)                           | (828,675)            | 2,087,370            |
| Net cash used in operating activities   | <u>(40,770,469)</u>                 | <u>(38,228,247)</u>  | <u>(56,596,468)</u>  |
| <b>Cash Flows From Investing Activities:</b>                                    |                                     |                      |                      |
| Purchase of property, plant and equipment                                       | (1,100,478)                         | (532,960)            | (1,418,641)          |
| Investment in leased property, net  | (2,233,334)                         | (2,461,526)          | —                    |
| Proceeds from sale of leased assets   | 3,221,168                           | —                    | —                    |
| Restricted cash   | 1,740,405                           | (2,265,405)          | —                    |
| Proceeds from disposal of property, plant and equipment                         | 121,564                             | 223,000              | 14,587               |
| Proceeds from trading securities  | 59,375,001                          | 3,500,000            | —                    |
| Proceeds from maturities and sales of available-for-sale securities             | 79,754,039                          | 137,555,930          | 266,774,180          |
| Purchases of available-for-sale securities                                      | <u>(42,311,734)</u>                 | <u>(161,803,208)</u> | <u>(199,713,772)</u> |
| Net cash provided by (used in) investing activities                             | <u>98,566,631</u>                   | <u>(25,784,169)</u>  | <u>65,656,354</u>    |
| <b>Cash Flows From Financing Activities:</b>                                    |                                     |                      |                      |
| Purchase of treasury stock  | (441,506)                           | (534,418)            | (618,642)            |
| Proceeds from stock option exercises and employee stock purchase plan           | —                                   | 76,493               | 202,875              |
| (Repayment) proceeds of borrowings under line of credit                         | (59,375,000)                        | (3,500,000)          | 62,875,000           |
| Proceeds from long term debt  | —                                   | 1,793,461            | —                    |
| Principal payments on long-term debt  | (1,561,371)                         | (229,602)            | —                    |
| Repayment of government assistance  | —                                   | —                    | (2,235,244)          |
| Net cash (used in) provided by financing activities                             | <u>(61,377,877)</u>                 | <u>(2,394,066)</u>   | <u>60,223,989</u>    |
| Effect of exchange rate changes on cash   | (43,865)                            | 142,965              | (516,313)            |
| (Decrease) Increase in cash and cash equivalents                                | (3,625,580)                         | (66,263,517)         | 68,767,562           |
| <b>Cash and cash equivalents, beginning of period</b>                           | <u>14,580,983</u>                   | <u>80,844,500</u>    | <u>12,076,938</u>    |
| <b>Cash and cash equivalents, end of period</b>                                 | <u>\$ 10,955,403</u>                | <u>\$ 14,580,983</u> | <u>\$ 80,844,500</u> |

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



**PLUG POWER INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE LOSS**

For the years ended December 31, 2010, 2009 and 2008

|   | Preferred Stock |          | Common Stock |              | Additional Paid-in-Capital | Accumulated Other Comprehensive Income (Loss) | Treasury Stock |                | Total Stockholders' Equity | Total Comprehensive Loss |
|---|-----------------|----------|--------------|--------------|----------------------------|---|----------------|----------------|----------------------------|--------------------------|
|   | Shares          | Amount   | Shares       | Amount       |                            |   | Shares         | Amount         |                            |                          |
| <b>December 31, 2007</b>  | 395,000         | \$ 3,950 | 87,882,922   | \$ 878,829   | \$ 758,169,498             | \$ 7,810,558                                  | —              | \$             | \$ 248,900,474             |                          |
| Net loss  | —               | —        | —            | —            | —                          | —   | —              | —              | (121,700,024)              | (121,700,024)            |
| Foreign currency translation loss   | —               | —        | —            | —            | —                          | (8,325,499)                                   | —              | —              | (8,325,499)                | (8,325,499)              |
| Unrealized gain on available-for-sale securities, net of reclassification adjustments for realized net losses and gains | —               | —        | —            | —            | —                          | 155,688                                       | —              | —              | 155,688                    | \$ (129,869,835)         |
| Total comprehensive loss  | —               | —        | —            | —            | —                          | —   | —              | —              | —                          | —                        |
| Stock based compensation  | —               | —        | 665,744      | 6,658        | 7,258,897                  | —   | —              | —              | 7,265,555                  |                          |
| Conversion of preferred stock   | (395,000)       | (3,950)  | 39,500,000   | 395,000      | (391,050)                  | —   | —              | —              | —                          |                          |
| Purchase of treasury stock  | —               | —        | —            | —            | —                          | —   | 402,114        | (743,586)      | (743,586)                  |                          |
| Stock option exercises  | —               | —        | 3,935        | 39           | 3,896                      | —   | —              | —              | 3,935                      |                          |
| Stock issued under employee stock purchase plan   | —               | —        | 111,402      | 1,114        | 306,465                    | —   | —              | —              | 307,579                    |                          |
| <b>December 31, 2008</b>  | —               | \$ —     | 128,164,003  | \$ 1,281,640 | \$ 765,347,706             | \$ (359,253)                                  | 402,114        | \$ (743,586)   | \$ 125,864,122             | (40,708,552)             |
| Net loss  | —               | —        | —            | —            | —                          | —   | —              | —              | —                          | (40,708,552)             |
| Foreign currency translation gain   | —               | —        | —            | —            | —                          | 1,293,770                                     | —              | —              | 1,293,770                  | (40,708,552)             |
| Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains | —               | —        | —            | —            | —                          | (131,308)                                     | —              | —              | (131,308)                  | (131,308)                |
| Total comprehensive loss  | —               | —        | —            | —            | —                          | —   | —              | —              | —                          | —                        |
| Stock based compensation  | —               | —        | 2,218,993    | 22,190       | 2,264,858                  | —   | —              | —              | 2,287,048                  |                          |
| Stock issued under employee stock purchase plan   | —               | —        | 208,240      | 2,083        | 196,008                    | —   | —              | —              | 198,091                    |                          |
| Purchase of treasury stock  | —               | —        | —            | —            | —                          | —   | 584,085        | (534,418)      | (534,418)                  |                          |
| <b>December 31, 2009</b>  | —               | \$ —     | 130,591,236  | \$ 1,305,913 | \$ 767,808,572             | \$ 803,209                                    | 986,199        | \$ (1,278,004) | \$ 88,268,753              | (46,958,921)             |
| Net loss  | —               | —        | —            | —            | —                          | —   | —              | —              | —                          | (46,958,921)             |
| Foreign currency translation gain   | —               | —        | —            | —            | —                          | 276,959                                       | —              | —              | 276,959                    | (46,958,921)             |
| Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains | —               | —        | —            | —            | —                          | (114,300)                                     | —              | —              | (114,300)                  | (46,958,921)             |
| Total comprehensive loss  | —               | —        | —            | —            | —                          | —   | —              | —              | —                          | —                        |
| Stock based compensation  | —               | —        | 3,107,999    | 31,079       | 1,851,299                  | —   | —              | —              | 1,882,378                  |                          |
| Purchase of treasury stock  | —               | —        | —            | —            | —                          | —   | 818,288        | (441,506)      | (441,506)                  |                          |
| <b>December 31, 2010</b>  | —               | \$ —     | 133,699,235  | \$ 1,336,992 | \$ 769,659,871             | \$ 965,868                                    | 1,804,487      | \$ (1,719,510) | \$ 42,913,363              | (727,329,858)            |

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

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. NATURE OF OPERATIONS**

**Description of Business**

Plug Power Inc., or the Company, is a leading provider of alternative energy technology and is involved in the design, development, commercialization and manufacture of fuel cell systems for the industrial off-road (forklift or material handling) market. Plug Power has also provided product development for the back-up and stationary power markets worldwide. Effective April 1, 2010, the Company was no longer considered a development stage enterprise since its principal operations began to provide more than insignificant revenues as the Company received orders from repeat customers, increased its customer base and had a significant backlog. Prior to April 1, 2010, the Company was considered a development stage enterprise because substantially all of our resources and efforts were 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.

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 concentrates its efforts on developing, manufacturing and selling our hydrogen-fueled PEM GenDrive® products on commercial terms for industrial off-road (forklift or material handling) applications, with a focus on multi-shift high volume manufacturing and high throughput distribution sites.

We have previously invested in development and sales activities for low-temperature remote-prime power GenSys® products and our GenCore® product, which is a hydrogen fueled PEM fuel cell system to provide back-up power for critical infrastructure. While Plug Power will continue to service and support GenSys and/or GenCore products on a limited basis, our main focus is our GenDrive product line.

The Company sells its products worldwide, with a primary focus on North America, 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 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). Through these acquisitions, and our continued GenDrive product development efforts, Plug Power became the first fuel cell company to offer a complete suite of products; Class 1 - sit-down counterbalance trucks, Class 2 – stand-up reach trucks and Class 3 – rider pallet trucks. The launch of our Class 2 product occurred in January of 2010.

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

Although the Company has a significant amount of available-for-sale securities, as described further below, as of December 31, 2010, neither the Company nor any of its subsidiaries was an “investment company” pursuant to the Investment Company Act of 1940, as amended.

**Liquidity**

We have experienced recurring operating losses and we anticipate incurring substantial additional losses. As of December 31, 2010, we had approximately \$11.0 million and \$10.4 million of cash and cash equivalents and available-for-sale securities, respectively, to fund our future operations. We believe that our current cash, cash equivalents, available-for-sale securities balances and cash generated from future sales will provide sufficient liquidity to fund operations into or through the first quarter of 2012. This projection is based on our current expectations regarding

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

product sales, cost structure, cash burn rate and operating assumptions (including those specified in the May 2010 restructuring plan described below), which do not include any funding from external sources of financing. In the event that our operating expenses are higher than anticipated or the gross margins and shipments of our GenDrive products do not increase as we expect, we may be required to implement contingency plans within our control to conserve and/or enhance our liquidity to meet operating needs. Such plans include; our ability to further reduce discretionary expenses, monetize our real estate assets through a sale-leaseback arrangement and obtain additional funding from licensing the use of our technologies. Our cash requirements relate primarily to working capital needed to operate and grow our business, including funding operating expenses, growth in inventory to support both shipments of new units and servicing the installed base, and continued development and expansion of our products. If our projections for significant order and shipment growth materialize, we believe we can obtain debt financing to fund the working capital needed to fulfill these orders and shipments. Our future liquidity and capital requirements will depend upon numerous factors, including those identified in “Risk Factors— We expect we will need to raise additional capital to fund our operations beyond the first quarter of 2012 and such capital may not be available to us, in which case we may have to reduce and/or cease our operations.” As a result, we can provide no assurance that we will be able to fund our operations beyond 2011 without external financing. We continue to evaluate opportunities to raise additional capital to fund our business beyond 2011. Alternatives under consideration include equity or debt financings, strategic alliances or joint ventures. If we are unable to obtain additional capital prior to the end of 2011, we may not be able to sustain our future operations beyond the first quarter of 2012 and may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection. We cannot assure you that any necessary additional financing will be available on terms favorable to us, or at all. Given the difficult current economic environment, we believe that it could be difficult to raise additional funds and there can be no assurance as to the availability of additional financing or the terms upon which additional financing may be available. Additionally, even if we raise sufficient capital through equity or debt financing, strategic alliances or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us.

As of December 31, 2010, we had cash and cash equivalents of \$11.0 million, available-for-sale securities of \$10.4 million and working capital of \$23.7 million.

**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.

**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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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 included 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.

**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.

**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, 2010 and 2009 consist of U.S. Treasury and auction rate debt securities. The Company classifies its securities in one of two categories: trading or available-for-sale. Trading securities consisted 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Where a decline in the fair value of any available for sale debt security below cost 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.

For other-than-temporarily impaired available for sale debt securities that management intends to sell, or where management believes it is more 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, the impairment charge is recognized in earnings equal to the difference between the fair value and 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, 2010 and 2009, inventory on consignment was valued at approximately \$725,000 and \$0, respectively.

#### **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. 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 the Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) ASC No. 350 at the date of its fiscal year end. As of December 31, 2010 and 2009, the Company has no goodwill. See Note 6, Goodwill and Other Intangible Assets for more information.



**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Intangible assets with estimable useful lives are amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment when certain triggering events occur. 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 during the second quarter of 2010 and determined that no impairment exists.

**Product and Service Revenue**

Effective April 1, 2010, the Company adopted Accounting Standards Update (ASU) ASU No. 2009-13 on Topic 605, Revenue Recognition— Multiple Deliverable Arrangements retroactive to January 1, 2010. The objective of this ASU 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 ASU provides amendments to the criteria in Subtopic 605-25 for separating consideration in multiple-deliverable arrangements. The amendments in this ASU 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 (ESP) if neither VSOE nor TPE is available. The amendments in this ASU also 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 and expands the disclosure requirements related to a vendor's multiple-deliverable revenue arrangements. This ASU is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, however, the Company chose early adoption of this ASU.

The Company was previously prohibited from separating these multiple deliverables into individual units of accounting without VSOE of fair value or other TPE of fair value. This evidence was not available due to our limited experience and lack of evidence of fair value of the undelivered components of the sale. Without this level of evidence, the Company had to treat each sale as a single unit of accounting and defer the revenue recognition of each sale, recognizing revenue over a straight-line basis as the continued service, maintenance and other support obligations expired. Under ASU No. 2009-13, the requirement to have VSOE or TPE in order to recognize revenue has been modified, and it now allows the vendor to make its best estimate of the standalone selling price of deliverables when more objective evidence of selling price is not available.

Prior to the adoption of ASU No. 2009-13, the Company applied 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 were 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 stipulated 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 stipulated that payment is not contingent on the achievement of specific milestones or other substantive performance, the multiple obligations within the Company's contractual arrangements were 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 deferred recognition of product and service revenue and recognized revenue on a straight-line basis over the stated contractual terms, as the continued service, maintenance and other support obligations expired, which were generally for periods of twelve (12) to thirty (30) months or which may have extended over multiple years.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

For all product and service revenue transactions entered into prior to the implementation of ASU No. 2009-13, the Company will continue to defer the 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 extend over multiple years. While contract terms for those transactions generally required payment shortly after shipment or delivery and installation of the fuel cell system and were not contingent on the achievement of specific milestones or other substantive performance, the multiple-element revenue obligations within our contractual arrangements were generally not accounted for separately based on our limited experience and lack of evidence of fair value of the undelivered components.

See Note 19, Multiple-Deliverable Revenue Arrangements for further discussion of our multiple-deliverable revenue arrangements.

The product and service revenue contracts entered into since January 1, 2010 generally provide a one to two-year product warranty to customers from date of shipment. We currently estimate the costs of satisfying warranty claims based on an analysis of past experience and provide for future claims in the period the revenue is recognized. The Company carefully monitors the warranty work requested by its customers and management believes that its current warranty reserve appears adequate as of December 31, 2010. The Company's product and service warranty as of December 31, 2010 is approximately \$862,000 and is included in product warranty reserve in the consolidated balance sheets.

In the case of the Company's limited consignment sales, the Company does not begin recognizing revenue 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, 2010 and 2009, the Company had unbilled amounts from product and service revenue in the amount of approximately \$107,000 and \$33,000, respectively and is included in other current assets in the consolidated balance sheets. At December 31, 2010 and 2009, the Company had customer deposits from product and service revenue, representing deposits in advance of performance of the allowable work, in the amount of approximately \$576,000 and \$0, respectively and is included in other current liabilities in the consolidated balance sheets. At December 31, 2010 and 2009, the Company had deferred product and service revenue in the amount of \$4.3 million and \$4.6 million, respectively and is included in deferred revenue in the consolidated balance sheets.

#### **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 30% 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, 2010 and 2009, the Company had unbilled amounts from research and development contract revenue in the amount of approximately \$457,000 and \$1.3 million, respectively and is included in other current assets in the consolidated balance sheets. At December 31, 2010 and 2009, 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 \$297,000 and \$159,000, respectively and is included in other current liabilities in the consolidated balance sheets.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**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   |
| Building improvements . . . . .             | 5–20 years |
| Software, machinery and equipment . . . . . | 1–15 years |

**Impairment 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 during the second quarter of 2010 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.

**Research and Development**

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

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**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, 2010, 2009 and 2008 since the Company remains in a NOL position.

**Per Share Amounts**

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.

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

|   | Year Ended December 31, |                       |                        |
|---|-------------------------|-----------------------|------------------------|
|   | 2010                    | 2009                  | 2008                   |
| Numerator:  |                         |                       |                        |
| Net loss . . . . .  | <u>\$(46,958,921)</u>   | <u>\$(40,708,552)</u> | <u>\$(121,700,024)</u> |
| Denominator:  |                         |                       |                        |
| Weighted average number of common shares<br>outstanding . . . . . | <u>131,231,619</u>      | <u>129,110,661</u>    | <u>89,383,480</u>      |

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

These dilutive potential common shares are summarized as follows:

|  | Year Ended December 31, |                   |                  |
|--|-------------------------|-------------------|------------------|
|  | 2010                    | 2009              | 2008             |
| Stock options outstanding .....                  | 4,463,251               | 5,981,286         | 6,119,804        |
| Unvested restricted stock (1) .....              | 4,379,523               | 8,682,666         | —                |
| Warrants .....                                   | 571,429                 | 571,429           | 571,429          |
| Number of dilutive potential common shares ..... | <u>9,414,203</u>        | <u>15,235,381</u> | <u>6,691,233</u> |

- (1) December 31, 2010, does not include 508,790 shares subsequently issued in 2011 (which will immediately vest) for the achievement of performance objectives in 2010.

**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 through the date of this filing for potential recognition or disclosure in the consolidated financial statements and has noted no other subsequent events requiring recognition or disclosure.

**Recently Adopted Accounting Pronouncements**

In January 2010, the FASB issued ASU No. 2010-06, Improving Disclosures About Fair Value Measurements. This ASU 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 were adopted by the Company during the reporting period ending March 31, 2010. As this ASU amends only the disclosure requirements for fair value measurements, the adoption did not impact its consolidated financial position, consolidated results of operations, or liquidity. The ASU 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 ASU amends only the disclosure requirements for fair value measurements, the adoption will have no impact on its consolidated financial position, consolidated results of operations, and liquidity.

In February 2010, the FASB issued ASU No. 2010-09, Subsequent Events - Amendments to Certain Recognition and Disclosure Requirements. This ASU provides guidance related to events that occur after the balance sheet date but before financial statements are issued or are available to be issued. This ASU guidance amends existing standards to address potential conflicts with the Securities and Exchange Commission (SEC) guidance and refines the scope of the reissuance disclosure requirements to include revised financial statements only. Under this guidance, SEC filers are no longer required to disclose the date through which subsequent events have been evaluated. These provisions were adopted by the Company during the reporting period ending March 31, 2010. As this ASU amends only the disclosure requirements for subsequent events, the adoption did not impact its consolidated financial position, consolidated results of operations, and liquidity. See "Subsequent Events" in Note 23.



**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**Recent Accounting Pronouncements**

In April 2010, the FASB issued ASU No. 2010-17, Revenue Recognition – Milestone Method (Topic 605). This ASU provides guidance on defining a milestone and determining when it may be appropriate to apply the milestone method of revenue recognition for research or development transactions. This ASU is effective prospectively for milestones achieved in fiscal years, and interim periods within those years, beginning on or after June 15, 2010. The Company is currently evaluating the impact, if any, of this new accounting update and plans to adopt this new standard on January 1, 2011 and does not believe adoption of this new standard will have a material effect on its consolidated financial position, consolidated results of operations, and liquidity.

In December 2010, the FASB issued ASU No. 2010-28, Intangibles — Goodwill and Other: When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts (a consensus of the EITF). This ASU modifies Step 1 of the goodwill impairment test for reporting units who have recognized goodwill and whose reporting unit carrying amount is either zero or negative. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist. Early adoption is not permitted. The Company is currently evaluating the impact, if any, of this new accounting update and plans to adopt this new standard on January 1, 2011 and does not believe adoption of this new standard will have a material effect on its consolidated financial position, consolidated results of operations, and 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.

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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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.

As of December 31, 2010, the Company no longer held any trading securities - auction rate debt securities since they were repurchased in July, 2010 at par by the third-party lender holding the collateral under the Repurchase Agreement which resulted in a corresponding reduction in amounts outstanding and the extinguishment of the Credit Line Agreement. At December 31, 2009, was \$53.4 million of trading securities - auction rate debt securities. The auction rate debt securities were secured by student loans which are generally guaranteed by the Federal government. These auction rate debt securities were 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 continued 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.

The following tables summarize the basis used to measure certain financial assets at fair value on a recurring basis in the consolidated balance sheets:

**Basis of Fair Value Measurements**

| <u>Balance at December 31, 2010</u>     | <u>Total</u>         | <u>Quoted Prices in Active<br/>Markets for Identical<br/>Items<br/>(Level 1)</u> | <u>Significant<br/>Other Observable<br/>Inputs<br/>(Level 2)</u> | <u>Significant<br/>Unobservable<br/>Inputs<br/>(Level 3)</u> |
|---|----------------------|--|--|--|
| Available-for-sale securities –         |                      |  |  |  |
| U.S. treasury securities . . . . .      | <u>\$ 10,403,315</u> | <u>\$ 10,403,315</u>   | <u>\$ —</u>  | <u>\$ —</u>  |
|   |                      |  |  |  |
| <u>Balance at December 31, 2009</u>     | <u>Total</u>         | <u>Quoted Prices in Active<br/>Markets for Identical<br/>Items<br/>(Level 1)</u> | <u>Significant<br/>Other Observable<br/>Inputs<br/>(Level 2)</u> | <u>Significant<br/>Unobservable<br/>Inputs<br/>(Level 3)</u> |
| Trading securities – auction rate       |                      |  |  |  |
| debt securities . . . . .               | <u>\$ 53,397,179</u> | <u>\$ —</u>  | <u>\$ —</u>  | <u>\$ 53,397,179</u>   |
| Available-for-sale securities . . . . . | <u>\$ 47,959,920</u> | <u>\$ 47,959,920</u>   | <u>\$ —</u>  | <u>\$ —</u>  |
| Auction rate debt securities            |                      |  |  |  |
| repurchase agreement . . . . .          | <u>\$ 5,977,822</u>  | <u>\$ —</u>  | <u>\$ —</u>  | <u>\$ 5,977,822</u>  |

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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>Fair Value<br/>Measurements Using<br/>Significant<br/>Unobservable Inputs</b> |
|--|--|
| <b>Trading Securities – Auction Rate Debt Securities</b>   |  |
| Beginning of period . . . . .  | \$ 53,397,179  |
| Sale of trading securities for the year ended December 31, 2010 . . . . .  | (59,375,001)   |
| Net unrealized gains on trading securities for the year ended December 31, 2010 . . . . .                                | <u>5,977,822</u>   |
| Fair value of trading securities - auction rate debt securities at December 31, 2010 . . . . .                           | <u>\$ —</u>  |
| <br>   |  |
|  | <b>Fair Value<br/>Measurements Using<br/>Significant<br/>Unobservable Inputs</b> |
| <b>Auction Rate Debt Securities Repurchase Agreement</b>   |  |
| Beginning of period . . . . .  | \$ 5,977,822   |
| Change in fair value of auction rate debt securities repurchase agreement for the year ended December 31, 2010 . . . . . | <u>(5,977,822)</u>   |
| Fair value of auction rate debt securities repurchase agreement at December 31, 2010 . . . . .                           | <u>\$ —</u>  |

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 U.S. 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. These securities were redeemed at par in July 2010.

**4. AVAILABLE-FOR-SALE SECURITIES**

The amortized cost and fair value of the Company’s available-for-sale securities as of December 31, 2010 were as follows:

|                                    | <b>Amortized<br/>Cost</b> | <b>Gross Unrealized<br/>Gains</b> | <b>Gross Unrealized<br/>Losses</b> | <b>Fair Value</b>    |
|------------------------------------|---------------------------|-----------------------------------|------------------------------------|----------------------|
| U.S. Treasury Securities . . . . . | <u>\$ 10,421,817</u>      | <u>\$ —</u>                       | <u>\$ 18,502</u>                   | <u>\$ 10,403,315</u> |

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

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

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Included in the above table are 2 securities where the current fair value is less than the related amortized cost at December 31, 2010. These unrealized losses do not reflect any deterioration of the credit worthiness of the issuers of the securities. All securities are of investment grade. The unrealized losses on these temporarily impaired securities are a result of changes in interest rates for fixed-rate securities where the interest rate received is less than the current rate available for new offerings of similar securities and changes in market spreads as a result of shifts in supply and demand. There were no unrealized losses in the available-for-sale securities portfolio at December 31, 2009. The contractual maturities of available-for-sale securities are all in the year ended December 31, 2011 for balances as of December 31, 2010, and December 31, 2010 for balances as of December 31, 2009.

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

|                                  | <u>2010</u>   | <u>2009</u>  | <u>2008</u>    |
|----------------------------------|---------------|--------------|----------------|
| Proceeds on sales . . . . .      | \$ 14,975,693 | \$ 3,699,149 | \$ 159,849,925 |
| Proceeds on maturities . . . . . | 64,778,346    | 133,856,781  | 106,924,255    |
| Gross realized gains . . . . .   | —             | —            | 404,074        |
| Gross realized losses . . . . .  | —             | —            | 14,890         |

**5. PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment at December 31, 2010 and 2009 consist of the following:

|  | <u>December 31,<br/>2010</u> | <u>December 31,<br/>2009</u> |
|--|------------------------------|------------------------------|
| Land . . . . .   | \$ 90,000                    | \$ 90,000                    |
| Buildings . . . . .                                      | 14,557,080                   | 14,557,080                   |
| Building improvements . . . . .                          | 6,843,954                    | 8,784,867                    |
| Software, machinery and equipment . . . . .              | <u>13,608,624</u>            | <u>16,131,696</u>            |
|  | 35,099,658                   | 39,563,643                   |
| Less accumulated depreciation and amortization . . . . . | <u>(25,261,027)</u>          | <u>(25,220,903)</u>          |
| Property, plant, and equipment, net . . . . .            | <u>\$ 9,838,631</u>          | <u>\$ 14,342,740</u>         |

Depreciation expense was \$4.9 million, \$3.4 million and \$4.4 million for the years ended December 31, 2010, 2009 and 2008, respectively.

In the fourth quarter of 2010, we abandoned our facility in Richmond, B.C. As a result, in accordance with ASC No. 360-10-35-47, Long-Lived Assets to Be Abandoned, we recorded depreciation expense in the amount of \$2.1 million.

**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 goodwill or changes in the carrying amount of goodwill for the years ended December 31, 2010 and 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. 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.

We estimated 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

In the fourth quarter of 2008, we completed steps 1 and 2 of the goodwill impairment test. This goodwill impairment test indicated that goodwill was impaired and we recorded a non-cash goodwill impairment charge of \$45.8 million, which was classified as goodwill impairment in the accompanying 2008 consolidated statement of operations.

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, 2010 are as follows:

|                                  | <u>Weighted Average<br/>Amortization Period</u> | <u>Gross Carrying<br/>Amount</u> | <u>Accumulated<br/>Amortization</u> | <u>Effect of<br/>Foreign Currency<br/>Translation</u> | <u>Total</u>        |
|----------------------------------|---|----------------------------------|-------------------------------------|---|---------------------|
| Acquired Technology . . . . .    | 8 years   | \$15,900,000                     | \$(7,776,713)                       | \$ 1,206,411  | \$ 9,329,698        |
| Customer Relationships . . . . . | 8 years   | 1,000,000                        | (458,304)                           | —   | 541,696             |
|                                  |   | <u>\$16,900,000</u>              | <u>\$(8,235,017)</u>                | <u>\$ 1,206,411</u>                                   | <u>\$ 9,871,394</u> |

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

|                                  | <u>Weighted Average<br/>Amortization Period</u> | <u>Gross Carrying<br/>Amount</u> | <u>Accumulated<br/>Amortization</u> | <u>Effect of<br/>Foreign Currency<br/>Translation</u> | <u>Total</u>        |
|----------------------------------|---|----------------------------------|-------------------------------------|---|---------------------|
| 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             |
|                                  |   | <u>\$16,900,000</u>              | <u>\$(5,971,390)</u>                | <u>\$ 893,220</u>                                     | <u>\$11,821,830</u> |

Amortization expense for acquired identifiable intangible assets for the years ended December 31, 2010, 2009, and 2008 was \$2.3 million, \$2.1 million, and \$2.2 million, respectively. Estimated amortization expense for subsequent years is as follows:

|                      |                     |
|----------------------|---------------------|
| 2011 . . . . .       | \$2,305,769         |
| 2012 . . . . .       | 2,305,769           |
| 2013 . . . . .       | 2,305,769           |
| 2014 . . . . .       | 2,305,769           |
| 2015 . . . . .       | 648,318             |
| Thereafter . . . . . | —                   |
| Total . . . . .      | <u>\$ 9,871,394</u> |

**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 sheet at December 31, 2009 was 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 years ended December 31, 2010 and 2009, \$59.4 million and \$3.5 million, respectively 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 was \$53.4 million at December 31, 2009. The Credit Line Agreement had 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% at December 31, 2009. Interest expense on the advances on the Credit Line Agreement was approximately \$305,000 and \$915,000 for the years ended December 31, 2010 and 2009, respectively.



**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The advances on the Credit Line Agreement were repayable on demand by the third-party lender. If the third-party lender had exercised its right to demand repayment of the advances under the Credit Line Agreement prior to June 30, 2010 (the date upon which the Company could first exercise its rights under the Repurchase Agreement discussed below), the third-party lender was 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 was \$59.4 million at December 31, 2009.

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 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, the fair value of this item was approximately \$6.0 million and was recorded as an asset on the consolidated balance sheets. The change in the fair value of the Repurchase Agreement for the years ended December 31, 2010 and 2009 was \$6.0 million and \$4.2 million, respectively, and is recorded as a realized loss on the consolidated statements of operations.

Effective July 1, 2010, all auction rate debt securities were repurchased at par by the third-party lender holding the collateral under the Repurchase Agreement which resulted in a corresponding reduction in amounts outstanding and the extinguishment of the Credit Line Agreement.

#### **8. DEBT AND LEASE ARRANGEMENT**

In March 2009, the Company signed a \$1.7 million promissory note issued by Key Equipment Finance Inc. (Key Equipment) for the purpose of financing GenDrive products leased to 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 was \$1.4 million and was 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 was recorded within restricted cash in the consolidated balance sheets.

On April 1, 2009, the Company began leasing the GenDrive products to 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 December 2010, the Company assigned all of its rights, title and interest in the lease to Somerset Capital Group, Ltd. (Somerset), but the Company will continue to provide maintenance in accordance with the lease agreement. In conjunction with the assignment of the lease, the Key Equipment promissory note was completely paid off by the Company and the collateralized cash was released to the Company. The Company sold all of the equipment under the lease to Somerset.

During 2010, the Company entered into the second phase of leased assets with Central Grocers. The terms of the arrangement are 60 monthly installments of \$24,640. 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

In December 2010, the Company assigned all of its rights, title and interest in the second phase lease to Somerset, but the Company will continue to provide maintenance in accordance with the lease agreement. The Company sold all of the equipment under the second phase lease to Somerset.

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, 2010 and 2009 was approximately \$10,000 and \$123,000, respectively and is recorded as current portion of long term debt and long term debt in the consolidated balance sheets.

**9. ACCRUED EXPENSES**

Accrued expenses at December 31, 2010 and 2009 consist of:

|   | <u>2010</u>        | <u>2009</u>        |
|---|--------------------|--------------------|
| Accrued payroll and compensation related costs . . . . .  | \$ 869,545         | \$2,310,273        |
| Accrued restructuring costs . . . . .                     | 1,392,568          | 1,694,456          |
| Accrued dealer commissions and customer rebates . . . . . | 492,700            | —                  |
| Accrued software costs . . . . .                          | 542,500            | —                  |
| Other accrued liabilities . . . . .                       | 1,038,916          | 1,842,812          |
|   | <u>\$4,336,229</u> | <u>\$5,847,541</u> |

**10. REPAYABLE GOVERNMENT ASSISTANCE**

During the year ended December 31, 2009, 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 provided 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 was repaid or until July 1, 2012, whichever came first. The maximum liability under this repayment obligation was Cdn\$850,000. If at any point Plug Power Canada's repayments reached this amount, the obligation would cease.

At April 1, 2009, the total amount repaid to the NRC was less than the Cdn\$500,000 contribution, therefore Plug Power Canada was required to make payments to the NRC until either the full Cdn\$500,000 was repaid or until July 1, 2012, whichever came first. As of February 2010 Plug Power Canada repaid the full Cdn\$500,000.

The Company 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 \$119,408 have been recorded as current portion of repayable government assistance (other current liabilities) in the consolidated balance sheet as of December 31, 2009.

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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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 May 25, 2010, the Company adopted a restructuring plan to focus and align the Company on its GenDrive business. As part of this plan, the Company has consolidated all operations to its Latham, New York headquarters. The Company recorded restructuring charges in the amount of \$8,096,868 within selling, general and administrative expenses in the consolidated statement of operations for 2010 in relation to this restructuring. At December 31, 2010, \$687,696 remains in accrued expenses on the consolidated balance sheets.

The accrued restructuring charges relating to the May 2010 restructuring are comprised of the following at December 31, 2010:

|                                 | Accrued<br>restructuring<br>charges at<br>January 1, 2010 | Total amount<br>expensed | Cash Payments         | Accrued<br>restructuring<br>charges at<br>December 31, 2010 |
|---------------------------------|---|--------------------------|-----------------------|---|
| Personnel Related . . . . .     | \$ —  | \$ 2,680,560             | \$(2,680,560)         | \$ —  |
| Contract Cancellation . . . . . | —   | 3,696,153                | (3,696,153)           | —   |
| Net Lease Obligations . . . . . | —   | 727,438                  | (39,742)              | 687,696   |
| Non-cash Settlement . . . . .   | —   | 967,997                  | N/A                   | N/A   |
| Other . . . . .                 | —   | 24,690                   | (24,690)              | —   |
| Total . . . . .                 | <u>\$ —</u>   | <u>\$ 8,096,838</u>      | <u>\$ (6,441,145)</u> | <u>\$ 687,696</u>   |

During 2008, the Company adopted two restructuring plans to focus the Company on becoming a market and sales driven organization, to drive revenue growth, improve organizational efficiency and to position the Company for long-term profitability. As part of the plans, the Company implemented reductions in workforce, terminated purchase commitments, charged off inventory related to lapsed product lines, cut back discretionary spending, and deferred non strategic projects. The Company recorded restructuring charges and revisions to previous estimates in the amount of (\$504,847), \$210,038 and \$7,735,165 within selling, general and administrative expenses in the consolidated statement of operations for the years ended December 31, 2010, December 31, 2009 and December 31, 2008, respectively. The Company recorded additional restructuring charges in the amount of \$2,295,370 in cost of product and service revenue in the consolidated statement of operations for the year ended December 31, 2008. At December 31, 2010, \$704,872 remains in accrued expenses on the consolidated balance sheets.

The accrued restructuring charges relating to the two 2008 restructurings are comprised of the following at December 31, 2010:

|                                 | Accrued<br>restructuring<br>charges at<br>January 1, 2010 | Adjustments to,<br>additional<br>accrued<br>restructuring<br>charges<br>or non-cash<br>charges | Cash payments       | Accrued<br>restructuring<br>charges at<br>December 31, 2010 |
|---------------------------------|---|--|---------------------|---|
| Personnel Related . . . . .     | \$ 16,000   | \$ (16,000)  | \$ —                | \$ —  |
| Contract Cancellation . . . . . | 1,275,810   | (518,364)  | (210,090)           | 547,356   |
| Net Lease Obligations . . . . . | 402,646   | 29,517   | (274,647)           | 157,516   |
| Total . . . . .                 | <u>\$ 1,694,456</u>                                       | <u>\$ (504,847)</u>  | <u>\$ (484,737)</u> | <u>\$ 704,872</u>   |

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**12. INCOME TAXES**

The components of income/(loss) before income taxes and the provision for income taxes for the years ended December 31, 2010, 2009 and 2008 are as follows:

|                                    | <u>2010</u>           | <u>2009</u>           | <u>2008</u>            |
|------------------------------------|-----------------------|-----------------------|------------------------|
| Income/(loss) before income taxes: |                       |                       |                        |
| United States.....                 | \$(38,567,000)        | \$(39,363,000)        | \$(95,363,000)         |
| Foreign .....                      | (8,392,000)           | (1,346,000)           | (26,337,000)           |
|                                    | <u>\$(46,959,000)</u> | <u>\$(40,709,000)</u> | <u>\$(121,700,000)</u> |

There was no current income tax expense for the years ended December 31, 2010, 2009 and 2008. 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 significant components of U.S. deferred income tax (benefit) expense for the years ended December 31, 2010, 2009 and 2008 are as follows:

|                                      | <u>2010</u>  | <u>2009</u>    | <u>2008</u>     |
|--------------------------------------|--------------|----------------|-----------------|
| Deferred tax (benefit)/expense.....  | \$ (652,000) | \$ (1,679,000) | \$ (18,983,000) |
| Net operating loss carryforward..... | (14,168,000) | (14,973,000)   | (9,308,000)     |
| Valuation allowance .....            | 14,820,000   | 16,652,000     | 28,291,000      |
| Provision for income taxes .....     | <u>\$ —</u>  | <u>\$ —</u>    | <u>\$ —</u>     |

The significant components of Foreign deferred income tax (benefit) expense for the years ended December 31, 2010, 2009 and 2008 are as follows:

|                                      | <u>2010</u>  | <u>2009</u>   | <u>2008</u>  |
|--------------------------------------|--------------|---------------|--------------|
| Deferred tax (benefit)/expense.....  | \$ (822,000) | \$(1,633,000) | \$ 2,020,000 |
| Net operating loss carryforward..... | (1,081,000)  | 147,000       | 786,000      |
| Valuation allowance .....            | 1,903,000    | 1,486,000     | (2,806,000)  |
| Provision for income taxes .....     | <u>\$ —</u>  | <u>\$ —</u>   | <u>\$ —</u>  |

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

|   | <u>Years ended December 31,</u> |             |             |
|---|---------------------------------|-------------|-------------|
|   | <u>2010</u>                     | <u>2009</u> | <u>2008</u> |
| U.S. Federal statutory tax rate .....             | (35.0)%                         | (35.0)%     | (35.0)%     |
| Deferred state taxes, net of federal benefit..... | (2.5)                           | (2.9)       | (1.8)       |
| Other, net .....                                  | (1.1)                           | (0.8)       | 0.1         |
| Goodwill impairment charge .....                  | —                               | —           | 12.3        |
| Foreign tax rate differential .....               | 2.2                             | 0.2         | 0.8         |
| Expiring attribute carryforward.....              | 1.2                             | —           | 0.7         |
| Adjustment to opening deferred tax balance .....  | 0.4                             | (4.3)       | 0.8         |
| Tax credits (net of monetization) .....           | (0.6)                           | 0.7         | (0.3)       |
| Change in valuation allowance.....                | <u>35.4</u>                     | <u>42.1</u> | <u>22.4</u> |
|   | <u>0.0%</u>                     | <u>0.0%</u> | <u>0.0%</u> |

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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, 2010 and 2009 are as follows:

|  | U.S.                     |                      | Foreign                  |                    |
|--|--------------------------|----------------------|--------------------------|--------------------|
|  | Years ended December 31, |                      | Years ended December 31, |                    |
|  | 2010                     | 2009                 | 2010                     | 2009               |
| Deferred tax assets and liabilities:                                   |                          |                      |                          |                    |
| Intangible assets . . . . .  | \$ 270,278               | \$ 340,574           | \$ (28,763)              | \$ (372,240)       |
| Non-employee stock-based compensation . . .                            | (1,792,727)              | (1,043,476)          | —                        | —                  |
| Gain on auction rate debt securities<br>repurchase agreement . . . . . | (2,271,572)              | (1,613,679)          | —                        | —                  |
| Impairment loss on<br>available-for-sale securities . . . . .          | 2,271,572                | 1,613,679            | —                        | —                  |
| Deferred revenue . . . . .   | 1,652,904                | 1,746,752            | —                        | —                  |
| Other reserves and accruals . . . . .                                  | 669,061                  | 572,913              | 206,184                  | 123,196            |
| Capital loss carryforwards . . . . .                                   | 5,883,889                | 5,883,889            | —                        | —                  |
| Research and development tax<br>credit carryforwards . . . . .         | 9,833,063                | 9,559,233            | 1,512,346                | 1,490,302          |
| Property, plant and equipment . . . . .                                | 753,930                  | 368,953              | 521,379                  | 170,778            |
| Amortization of stock-based compensation . . .                         | 7,490,246                | 7,211,439            | —                        | —                  |
| Research and development expenditures . . . .                          | 17,328,000               | 16,796,000           | 3,667,068                | 3,613,615          |
| Repayable government assistance . . . . .                              | —                        | —                    | —                        | 29,852             |
| Net operating loss carryforwards . . . . .                             | <u>217,868,010</u>       | <u>203,699,706</u>   | <u>3,958,652</u>         | <u>2,877,873</u>   |
| Total deferred tax asset . . . . .                                     | 259,956,654              | 245,135,983          | 9,836,867                | 7,933,376          |
| Less valuation allowance . . . . .                                     | <u>(259,956,654)</u>     | <u>(245,135,983)</u> | <u>(9,836,867)</u>       | <u>(7,933,376)</u> |
| Net deferred tax assets . . . . .                                      | <u>\$ —</u>              | <u>\$ —</u>          | <u>\$ —</u>              | <u>\$ —</u>        |



**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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, 2010 and 2009 of approximately \$269.8 million and \$253.1 million, respectively. A reconciliation of the current year change in valuation allowance is as follows:

|  | <u>Total</u>         | <u>U.S.</u>          | <u>Foreign</u>      |
|--|----------------------|----------------------|---------------------|
| Increase in valuation allowance for current year       |                      |                      |                     |
| increase in net operating losses . . . . .             | \$ 14,480,000        | \$ 14,169,000        | \$ 311,000          |
| Increase in valuation allowance for current year       |                      |                      |                     |
| net increase in deferred tax assets other than         |                      |                      |                     |
| net operating losses . . . . .                         | 1,411,000            | 652,000              | 759,000             |
| Increase in valuation allowance as a result of foreign |                      |                      |                     |
| currency fluctuation . . . . .                         | 117,000              | —                    | 117,000             |
| Decrease in valuation allowance as a result of change  |                      |                      |                     |
| in foreign tax rate . . . . .                          | —                    | —                    | —                   |
| Increase in valuation allowance due to current year    |                      |                      |                     |
| change of deferred tax assets as the result of         |                      |                      |                     |
| uncertain tax positions . . . . .                      | 716,000              | —                    | 716,000             |
| Net increase in valuation allowance . . . . .          | <u>\$ 16,724,000</u> | <u>\$ 14,821,000</u> | <u>\$ 1,903,000</u> |

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, 2010 and December 31, 2009 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, 2010, the Company has unused Federal and State net operating loss carryforwards of approximately \$674.6 million, of which \$74.2 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 \$553.6 million was generated by the Company during the period October 1, 1999 through December 31, 2010. The net operating loss carryforwards if unused will expire at various dates from 2011 through 2030. In 2010, net operating loss carryforwards of \$2.4 million acquired as part of the H Power transaction expired.

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. As a result of certain equity transactions, the Company may have had an ownership change for IRC Section 382 purposes. Please refer to Part I Item 7 Recent Developments in this Annual Form 10-K.

Based upon an IRC Section 382 study, a Section 382 ownership change occurred in 2005 that resulted in approximately \$479 million of the \$674.6 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 \$49.3 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, 2010.

At December 31, 2010, the Company has Federal capital loss carryforwards of approximately \$15.5 million available to offset future capital gains that will expire in 2011. At December 31, 2010, the Company has US Federal Research and Experimentation credit carryforwards of approximately \$15.6 million available to offset future income

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

tax that will expire at various dates from 2020 through 2030. 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, 2010.

At December 31, 2010, the Company has unused foreign net operating loss carryforwards of approximately \$16.4 million. The net operating loss carryforwards if unused will expire at various dates from 2014 through 2030. At December 31, 2010, the Company has Scientific Research and Experimental Development expenditures of \$21.5 million available to offset future taxable income. These expenditures have no expiry date. At December 31, 2010, 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 2011 through 2027. Approximately \$607,000 of the net operating loss carryforwards, \$6.8 million of the Scientific Research and Experimental Development expenditures and \$834,000 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, 2010.

The Company intends to reinvest indefinitely any unrepatriated foreign earnings. As of December 31, 2010, the Company has no unrepatriated foreign earnings. The Company has not provided for US income taxes on any undistributed earnings of its foreign subsidiaries because management considers that any such earnings will 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.

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

|  | <u>2010</u>          | <u>2009</u>          | <u>2008</u>          |
|--|----------------------|----------------------|----------------------|
| Unrecognized tax benefits balance at beginning of year . . .               | \$ 18,570,177        | \$ 18,149,125        | \$ 16,119,790        |
| Additions for tax positions of prior years . . . . .                       | —                    | —                    | 2,518,182            |
| Reductions based on tax positions related<br>to the current year . . . . . | —                    | —                    | —                    |
| Reductions for tax positions of prior years . . . . .                      | (716,419)            | (55,884)             | —                    |
| Settlements . . . . .  | —                    | —                    | —                    |
| Currency translation . . . . .   | 39,253               | 476,936              | (488,847)            |
| Unrecognized tax benefits balance at end of year . . . . .                 | <u>\$ 17,893,011</u> | <u>\$ 18,570,177</u> | <u>\$ 18,149,125</u> |

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, 2010, the Company recognized \$0 in interest and penalties. The Company had \$1.2 million in interest and penalties accrued at December 31, 2010.

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 2007 to 2010. Open tax years in the foreign jurisdictions range from 2004 to 2010. However, upon examination in subsequent years, if net operating loss 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, 2010, 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.

**13. STOCKHOLDERS' EQUITY**

The Company has financed our operations primarily from the sale of equity (including those related to stock-based compensation less stock issuance costs). This includes 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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, 2010 and 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, 2010 and 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, 2010 and 2009 there were 133,699,235 and 130,591,236, respectively shares of common stock issued and outstanding.

**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 were eligible to purchase shares of the Company's common stock at a discount through periodic payroll deductions. The Plan was intended to meet the requirements of Section 423 of the Internal Revenue Code. Purchases occurred 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 was lower. Participants could 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 reserved 1,000,000 shares of common stock for issuance under the Plan. The Company issued 0, 208,240 and 111,402 shares of stock under the Plan during 2010, 2009, and 2008, 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 valued 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 was 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 was 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 was recognized on a straight-line basis over the offering period.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

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 Plan**

***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).

At December 31, 2010 there were approximately 4.5 million options granted and outstanding and 6.6 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. 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 \$247,000 of the total share-based payment expense recorded for the year ended December 31, 2010. 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 150,000, 1,375,500 and 1,114,750 options granted during the years ended December 31, 2010, 2009 and 2008, respectively were as follows:

|                                   | <u>2010</u> | <u>2009</u> | <u>2008</u> |
|-----------------------------------|-------------|-------------|-------------|
| Dividend yield:                   | 0%          | 0%          | 0%          |
| Expected term of options (years): | 6           | 6           | 6           |
| Risk free interest rate:          | 1.52%-2.93% | 1.79%-2.80% | 2.56%-3.45% |
| Volatility:                       | 94%-95%     | 85%-89%     | 61%-84%     |

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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A summary of stock option activity for the year December 31, 2010 is as follows:

|   | <u>Shares</u>    | <u>Weighted<br/>Average<br/>Exercise Price</u> | <u>Weighted<br/>Average<br/>Remaining<br/>Contractual<br/>Terms</u> | <u>Aggregate<br/>Intrinsic Value</u> |
|---|------------------|--|---|--------------------------------------|
| Options outstanding at December 31, 2009 . . . . .  | 5,981,286        | \$ 6.97  | <u>5.9</u>  |                                      |
| Granted . . . . .                                   | 150,000          | 0.49   |   |                                      |
| Exercised . . . . .                                 | —                | —  |   |                                      |
| Forfeited . . . . .                                 | (265,787)        | 0.88   |   |                                      |
| Expired . . . . .                                   | (1,402,248)      | 15.80  |   |                                      |
| Options outstanding at December 31, 2010 . . . . .  | <u>4,463,251</u> | <u>\$ 4.35</u>                                 | <u>5.79</u>   | <u>\$ —</u>                          |
| Options exercisable at December 31, 2010 . . . . .  | <u>3,796,631</u> | <u>\$ 4.96</u>                                 | <u>5.29</u>   | <u>\$ —</u>                          |
| Options fully vested at December 31, 2010 . . . . . | <u>3,796,631</u> | <u>\$ 4.96</u>                                 | <u>5.29</u>   | <u>\$ —</u>                          |

The weighted average grant date fair value of options granted during the years ended December 31, 2010, 2009 and 2008 was \$0.38, \$0.66 and \$1.68, respectively. There were no stock options exercised during the year ended December 31, 2010. As of December 31, 2010, there was approximately \$329,000 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, 2010 and 2009 was approximately \$247,000 and \$291,000, respectively.

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 \$369,000 associated with its restricted stock awards in 2010. As of December 31, 2010, there was \$3.7 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, 2010 is as follows:

|  | <u>Shares</u>      | <u>Aggregate<br/>Intrinsic<br/>Value</u> |
|--|--------------------|--|
| Unvested restricted stock at December 31, 2009 . . . . . | 8,682,666          | \$ 7,294,489                             |
| Granted . . . . .  | 1,966,716          | 1,062,027                                |
| Forfeited . . . . .                                      | (4,298,145)        | (3,610,909)                              |
| Vested . . . . .   | <u>(1,971,714)</u> | <u>(1,066,575)</u>                       |
| Unvested restricted stock at December 31, 2010 . . . . . | <u>4,379,523</u>   | <u>\$ 3,679,032</u>                      |

For the years ended December 31, 2010, 2009, and 2008, the Company recorded expense of approximately \$1.2 million, \$1.9 million, and \$8.6 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 901,661, 607,553 and 379,189 shares of common stock to the Plug Power Inc. 401(k) Savings & Retirement Plan during 2010, 2009 and 2008, respectively.

The Company's expense for this plan, including the issuance of shares, was approximately \$441,000, \$534,000 and \$835,000 for years ended December 31, 2010, 2009 and 2008, respectively.



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

In the event stretch revenue and EBITDAS metrics are reached during the next two years of the grant period ending December 31, 2011 and December 31, 2012, the Company could issue a maximum of 4,376,189 shares to LTI Plan participants, currently representing approximately 3.3% of total outstanding shares. Restrictions on these shares only lapse in the event the Company performs at the articulated performance metrics.

In 2010, no threshold, target or stretch revenue and EBITDAS performance-based metrics were reached. Accordingly, no restrictions lapsed in 2011 and 20% of the total awarded RSUs were forfeited for the 2010 fiscal year. Therefore, no expense was recorded during the year ended December 31, 2010.

**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, 2010 and 2009, the Company had no payables due to DTE under this commission provision and no outstanding receivables from DTE.

**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 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*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. During the year ended December 31, 2010, the Company paid off all long term debt.

**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, 2010, 2009 and 2008:

|   | <u>2010</u> | <u>2009</u> | <u>2008</u>    |
|---|-------------|-------------|----------------|
| Stock-based compensation accrual impact, net . . . . .                      | \$ 707,802  | \$ 480,145  | \$ (1,341,324) |
| Change in unrealized loss/gain on available-for-sale securities . . . . .   | (114,300)   | (131,308)   | 155,688        |
| Restricted shares forfeited . . . . .                                       | —           | —           | (124,945)      |
| Transfer to trading securities – auction rate debt securities . . . . .     | —           | —           | 52,650,654     |
| Cash paid for interest . . . . .  | 471,386     | 999,665     | —              |
| Transfer of property, plant and equipment to assets held for sale . . . . . | 768,779     | —           | —              |

**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. As of December 31, 2010 and 2009, approximately \$209,000 and \$363,000, respectively, have been recorded as accrued expenses in the consolidated balance sheets related to the development collaboration agreement.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**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, 2010 and 2009, approximately \$4,000 and \$2,000, respectively, have been recorded as accrued expenses in the consolidated balance sheets related to the royalty provisions.

**Leases**

As of December 31, 2010 and 2009, 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, 2010 are:

| <u>Year ending December 31</u>            | <u>Operating leases</u> |
|---|-------------------------|
| 2011 .....                                | \$ 573,206              |
| 2012 .....                                | 476,230                 |
| 2013 .....                                | 369,959                 |
| 2014 .....                                | 316,823                 |
| 2015 and thereafter .....                 | 1,333,139               |
| Total future minimum lease payments ..... | <u>\$3,069,357</u>      |

Minimum future rental income receivable under subleases from non-cancelable operating leases were \$153,932 and \$437,028 as of December 31, 2010 and 2009, respectively.

Rental expense for all operating leases for the years ended December 31, 2010, 2009 and 2008 were as follows:

|                              | <u>2010</u>         | <u>2009</u>         | <u>2008</u>         |
|------------------------------|---------------------|---------------------|---------------------|
| Minimum rentals .....        | \$ 2,153,000        | \$ 1,819,000        | \$ 1,909,000        |
| Sublease rental income ..... | (269,000)           | (5,000)             | —                   |
| Total .....                  | <u>\$ 1,884,000</u> | <u>\$ 1,814,000</u> | <u>\$ 1,909,000</u> |

**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, 2010, five customers comprise approximately 83.6% of the total accounts receivable balance, with each customer individually representing 33.7%, 33.5%, 6.7%, 6.0% and 3.6% of total accounts receivable, respectively. 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.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

For the year ended December 31, 2010, contracts with two customers and one federal government agency each accounted for 10% or more of total consolidated revenues. For the year ended December 31, 2009, contracts with the federal government accounted for approximately \$5.6 million or 45.6% of total consolidated revenues. For the year ended December 31, 2008, contracts with the federal government accounted for approximately \$8.3 million or 46.6% of total consolidated revenues, contracts with the state government accounted for approximately \$1.9 million or 10.7% and one customer accounted for approximately \$1.9 million or 10.7% of total consolidated revenues.

The Company has cash deposits in excess of federally insured limits. The amount of such deposits is essentially all cash at December 31, 2010.

**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. Amendment No. 1 to the Hydrogen Payment Agreement became effective April 1, 2010 and increased the monthly service charge to \$25,971 to accommodate for the addition of two dispensers and associated piping.

**Lease Buyout Arrangement**

Pursuant to an agreement negotiated between Central Grocers and the Company, the Company had an obligation to assume or buy out the leases for batteries, chargers and battery changing equipment for a certain amount of stand up rider trucks. On January 14, 2011, the Company bought out the leases for a total amount of \$958,817 and retains ownership of the equipment.

**19. MULTIPLE-DELIVERABLE REVENUE ARRANGEMENTS**

Effective April 1, 2010, the Company adopted ASU No. 2009-13 on Topic 605, Revenue Recognition— Multiple Deliverable Revenue Arrangements retroactive to January 1, 2010. The objective of this ASU 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 ASU provides amendments to the criteria in Subtopic 605-25 for separating consideration in multiple-deliverable arrangements. The amendments in this ASU 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 (ESP) if neither VSOE nor TPE is available. The amendments in this ASU also 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 and expands the disclosure requirements related to a vendor's multiple-deliverable revenue arrangements. This ASU is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010, however, the Company chose early adoption of this ASU as noted above.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

In an arrangement with multiple-deliverables, the delivered items will be considered a separate unit of accounting if the following criteria are met:

- The delivered item or items have value to the customer on a standalone basis.
- If the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item or items is considered probable and substantially in the control of the vendor.

The Company enters into multiple-deliverable revenue arrangements that may contain a combination of fuel cell systems or equipment, installation, service, maintenance, fueling and other support services. The delivered item, equipment, does have value to the customer on a standalone basis and could be separately sold by another vendor. In addition, the Company does not include a right of return on its products.

The Company was previously prohibited from separating these multiple deliverables into individual units of accounting without VSOE of fair value or other TPE of fair value. This evidence was not available due to our limited experience and lack of evidence of fair value of the undelivered components of the sale. Without this level of evidence, the Company had to treat each sale as a single unit of accounting and defer the revenue recognition of each sale, recognizing revenue over a straight-line basis as the continued service, maintenance and other support obligations expired. Under ASU No. 2009-13, the requirement to have VSOE or TPE in order to recognize revenue has been modified, and it now allows the vendor to make its best estimate of the standalone selling price of deliverables when more objective evidence of selling price is not available.

Per the provisions of ASU No. 2009-13, the Company allocates arrangement consideration to each deliverable in an arrangement based on its relative selling price. The Company determines selling price using VSOE, if it exists, otherwise TPE. If neither VSOE nor TPE of selling price exists for a unit of accounting, the Company uses ESP.

VSOE is generally limited to the price that a vendor charges when it sells the same or similar products or services on a standalone basis. TPE is determined based on the prices charged by competitors of the Company for a similar deliverable when sold separately. The Company generally expects that it will not be able to establish VSOE or TPE for certain deliverables due to the lack of standalone sales and the nature of the markets in which the Company competes, and, as such, the Company typically will determine selling price using ESP.

The objective of ESP is to determine the price at which the Company would transact if the product or service were sold by the Company on a standalone basis. The Company's determination of ESP may involve a weighting of several factors based on the specific facts and circumstances of the arrangement. Specifically, the Company may consider the cost to produce the deliverable, the anticipated margin on that deliverable, the selling price and profit margin for similar parts, the Company's ongoing pricing strategy and policies, the value of any enhancements that have been built into the deliverable and the characteristics of the varying markets in which the deliverable is sold, as applicable. The Company will determine ESP for deliverables in future agreements based on the specific facts and circumstances of the arrangement.

As noted above, in determining selling price, TPE is generally not readily available due to a lack of a competitive environment in selling fuel cell technology. However, when determining selling price for certain deliverables such as service and maintenance, if available, the Company utilizes prices charged by its competitors as TPE when estimating its costs for labor hours.

Each deliverable within the Company's multiple-deliverable revenue arrangements is accounted for as a separate unit of accounting under the guidance of ASU No. 2009-13. Once a standalone selling price for all the deliverables that meet the separation criteria has been met, whether by VSOE, TPE or ESP, the relative selling price method is used to proportionately allocate each element of the arrangement to the sale consideration. The Company plans to analyze the selling prices used in its allocation of arrangement consideration at a minimum on an annual basis. Selling prices will be analyzed on a more frequent basis if a significant change in the Company's business necessitates a more timely analysis or if the Company experiences significant variances in its selling prices.



**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Deliverables not meeting the criteria for being a separate unit of accounting are combined with a deliverable that does meet that criterion. The appropriate allocation of arrangement consideration and recognition of revenue is then determined for the combined unit of accounting.

The majority of the Company's multiple-deliverable revenue arrangements ship complete within the same quarter. The Company anticipates that the effect of the adoption of this guidance on subsequent periods will be primarily based on the arrangements entered into and the timing of shipment of deliverables.

As a result of implementing ASU No. 2009-13, the Company recognized approximately \$10.5 million as revenue in the twelve months ended December 31, 2010 that would have been deferred under the previous guidance for multiple-element revenue arrangements. Total revenue recognized under multiple-deliverable revenue arrangements in the twelve months ended December 31, 2010 was approximately 66.6% of total product and service revenue.

During the previously reported interim period ended March 31, 2010, the following was reported in the condensed consolidated statement of operations:

|                                       |                 |
|---------------------------------------|-----------------|
| Product and service revenue . . . . . | \$ 1,539,342    |
| Net loss . . . . .                    | \$ (12,182,585) |
| Earnings per share . . . . .          | \$ (0.09)       |

During the previously reported interim period ended March 31, 2010, the following would have been the effect of the change of adopting ASU No. 2009-13 in the condensed consolidated statement of operations:

|                                       |                 |
|---------------------------------------|-----------------|
| Product and service revenue . . . . . | \$ 3,163,177    |
| Net loss . . . . .                    | \$ (10,558,750) |
| Earnings per share . . . . .          | \$ (0.08)       |

For all product and service revenue transactions entered into prior to the implementation of ASU No. 2009-13, the Company will continue to defer the 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 extend over multiple years. While contract terms for those transactions generally required payment shortly after shipment or delivery and installation of the fuel cell system and were not contingent on the achievement of specific milestones or other substantive performance, the multiple-element revenue obligations within our contractual arrangements were generally not accounted for separately based on our limited experience and lack of evidence of fair value of the undelivered components.

**20. LICENSING AGREEMENT**

On October 26, 2010, the Company licensed the intellectual property relating to its stationary power products, GenCore and GenSys, to IdaTech plc on a non-exclusive basis. Plug Power maintains ownership of, and the right to use, the patents and other intellectual property licensed to IdaTech. As part of the transaction, Plug Power also sold inventory, equipment and certain other assets related to its stationary power business. Total consideration for the licensing and assets was \$5 million and was received during October 2010. The consideration is subject to reduction by a maximum of \$1 million in the event that the Company does not deliver certain of the assets sold. As of December 31, 2010, \$1.0 million is included in assets held for sale and \$1.0 million is included in other current liabilities in the consolidated balance sheets, respectively until all assets have been sold. Upon the sale of assets, the \$1.0 million of consideration will be released.

**PLUG POWER INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**21. GEOGRAPHIC INFORMATION**

The following is a summary of revenue for the years ended December 31, 2010, 2009 and 2008, based on physical location of the subsidiary making the sale:

|                         | <u>2010</u>   | <u>2010</u>  | <u>2009</u>                    | <u>2009</u>  | <u>2008</u>                    | <u>2008</u>  |
|-------------------------|---|--|--------------------------------|--|--------------------------------|--|
|                         | Product and<br>service and<br>licensed<br>technology<br>revenue | Research and<br>development<br>contract<br>revenue | Product and service<br>revenue | Research and<br>development<br>contract<br>revenue | Product and service<br>revenue | Research and<br>development<br>contract<br>revenue |
| United States . . . . . | \$ 15,740,087   | \$3,463,508  | \$4,683,627                    | \$7,269,404  | \$4,442,432                    | \$ 10,779,553                                      |
| Canada . . . . .        | 134,692   | 134,362  | 149,146                        | 190,379  | 224,863                        | 2,454,469  |
| Total . . . . .         | <u>\$ 15,874,779</u>  | <u>\$3,597,870</u>                                 | <u>\$4,832,773</u>             | <u>\$ 7,459,783</u>                                | <u>\$4,667,295</u>             | <u>\$13,234,022</u>                                |

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, 2010 and 2009, are as follows:

|                         | <u>2010</u>          | <u>2009</u>         |
|-------------------------|----------------------|---------------------|
| United States . . . . . | \$ 13,839,370        | \$ 18,572,109       |
| India . . . . .         | —                    | 14,222              |
| Canada . . . . .        | 6,133,894            | 9,834,011           |
| Total . . . . .         | <u>\$ 19,973,264</u> | <u>\$28,420,342</u> |

**22. UNAUDITED QUARTERLY FINANCIAL DATA (IN THOUSANDS, EXCEPT PER SHARE DATA)**

|   | <u>Quarters Ended</u>     |                          |                               |                              |
|---|---------------------------|--------------------------|-------------------------------|------------------------------|
|   | <u>March 31,<br/>2010</u> | <u>June 30,<br/>2010</u> | <u>September 30,<br/>2010</u> | <u>December 31,<br/>2010</u> |
| Product and service revenue . . . . .               | \$ 3,163                  | \$ 2,326                 | \$ 4,795                      | \$ 5,455                     |
| Research and development contract revenue . . . . . | 1,208                     | 778                      | 957                           | 655                          |
| Licensed technology revenue . . . . .               | —                         | —                        | —                             | 136                          |
| Net loss . . . . .                                  | (10,558)                  | (18,516)                 | (9,292)                       | (8,593)                      |
| Loss per share:                                     |                           |                          |                               |                              |
| Basic and diluted . . . . .                         | (0.09)                    | (0.14)                   | (0.07)                        | (0.07)                       |

|                                       | <u>Quarters Ended</u>     |                          |                               |                              |
|---------------------------------------|---------------------------|--------------------------|-------------------------------|------------------------------|
|                                       | <u>March 31,<br/>2009</u> | <u>June 30,<br/>2009</u> | <u>September 30,<br/>2009</u> | <u>December 31,<br/>2009</u> |
| 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)                       |

**23. SUBSEQUENT EVENTS**

The Company has evaluated subsequent events and transactions through the date of this filing for potential recognition or disclosure in the financial statements and has noted no subsequent events requiring recognition or disclosure.

**Consent of Independent Registered Public Accounting Firm**

The Board of Directors  
Plug Power Inc.:

We consent to the incorporation by reference in the registration statements on Form S-8 (Nos. 333-90275, 333-90277 and 333-72734), and Form S-3 (Nos. 333-109737 and 333-117358) of Plug Power Inc., of our reports dated March 31, 2011, with respect to the consolidated balance sheets of Plug Power Inc. and subsidiaries as of December 31, 2010 and 2009, 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, 2010, and the effectiveness of internal control over financial reporting as of December 31, 2010, which reports appear in the December 31, 2010 annual report on Form 10-K of Plug Power Inc.

Our report with respect to the consolidated financial statements refers to a change in the method of accounting for revenue arrangements with multiple-deliverables entered into or substantially modified after January 1, 2010.

/S/ KPMG LLP

Albany, New York  
March 31, 2011

**Exhibit 31.1**

I, Andrew Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Plug Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2011

by:                     /s/ ANDREW MARSH                      
                    **Andrew Marsh**  
                    **Chief Executive Officer**

I, Gerald A. Anderson, certify that:

1. I have reviewed this annual report on Form 10-K of Plug Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2011

by:           /s/ GERALD A. ANDERSON            
**Gerald A. Anderson**  
**Chief Financial Officer**



**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Plug Power Inc. (the "Company") on Form 10-K for the period ended December 31, 2010 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), I, Andrew Marsh, Chief Executive Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 ("§ 906"), that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being furnished and not filed, and shall not be incorporated into any documents for any other purpose, under the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended. A signed original of this written statement required by § 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ ANDREW MARSH

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**Andrew Marsh**  
**Chief Executive Officer**  
**March 31, 2011**

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Plug Power Inc. (the "Company") on Form 10-K for the period ended December 31, 2010 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), I, Gerald A. Anderson, Chief Financial Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 ("§ 906"), that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

This certification is being furnished and not filed, and shall not be incorporated into any documents for any other purpose, under the Securities Exchange Act of 1934, as amended, or the Securities Act of 1933, as amended. A signed original of this written statement required by § 906 has been provided to the Company and will be retained by the Company and furnished to the SEC or its staff upon request.

/s/ GERALD A. ANDERSON

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**Gerald A. Anderson**  
**Chief Financial Officer**  
**March 31, 2011**

## **CORPORATE INFORMATION**

### **PLUG POWER MANAGEMENT**

Andrew J. Marsh  
President, Chief Executive Officer and Director

Gerald A. Anderson  
Chief Financial Officer and Senior Vice President -  
Operations

Gerard L. Conway, Jr.  
General Counsel, Corporate Secretary and  
Senior Vice President - Government Relations

Adrian J. Corless  
Chief Technology Officer, Senior Vice President -  
Engineering

Erik J. Hansen  
Senior Vice President - Sales, Service and Hydrogen

Reid A. Hislop  
Vice President - Marketing and Investor Relations

### **CORPORATE HEADQUARTERS**

PLUG POWER INC.  
968 Albany Shaker Road  
Latham, NY 12110  
518.782.7700  
[www.plugpower.com](http://www.plugpower.com)

### **STOCK TRANSFER AGENT AND REGISTRAR**

American Stock Transfer and Trust Company  
6201 15<sup>th</sup> Avenue  
Brooklyn, NY 11219  
(800) 937-5449

### **INDEPENDENT AUDITORS**

KPMG LLP  
515 Broadway  
Albany, NY 12207  
(518) 427-4600

### **BOARD OF DIRECTORS**

Larry G. Garberding  
Director

Maureen O. Helmer  
Director

Andrew Marsh  
Director

George C. McNamee  
Chairman of the Board

Gary K. Willis  
Director

### **STOCK EXCHANGE LISTING**

Plug Power's common stock is traded on the NASDAQ capital market under the symbol "PLUG."

### **FORM 10-K**

Plug Power's Annual Report on Form 10-K for the fiscal year ended December 31, 2010, filed with the Securities Exchange Commission is available on the Company's website under the Investor Relations section. The Form 10-K and exhibits may also be obtained upon written request addressed to Investor Relations, Plug Power Inc, 968 Albany Shaker Road, Latham, NY 12110.