PLUG POWER INC
Form 10-K
March 30, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2011

¨ **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	**22-3672377**
(State or Other Jurisdiction of Incorporation or Organization)	**(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	The NASDAQ Capital Market
Series A Junior Participating Cumulative Preferred Stock, par value $.01 per share	The NASDAQ Capital Market

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

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

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 o No x

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 x No o

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 x No o

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. o

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
o	o	x	o

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

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, 2011was $39,112,979.

As of March 29, 2012, 37,767,541 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 we expect we will need to raise additional capital to fund our operations and such capital may not be available to us; the risk that the previously disclosed expected uses of the Company s recently raised capital may change; 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; the risk that pending orders may not convert to purchase orders; 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 IA Risk Factors. Readers should not place undue reliance on our forward-looking statements. These forward-looking statements speak only as of the date on which the statements were made and are not guarantees of future performance. Except as may be required by applicable law, we do not undertake or intend to update any forward-looking statements after the date of this Annual Report on Form 10-K.

Item 1. Business

Company Background

Plug Power Inc., or the Company, is a 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.

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.

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. 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.

Effective April 1, 2010, we were no longer considered a development stage enterprise since principal operations began to provide more than insignificant revenues as we received orders from repeat customers, increased our customer base and had a significant backlog. Prior to April 1, 2010, we were 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.

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 market. 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, an 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, and software.

Business Organization

We manage our business as a single reporting segment, 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. In October, 2011 we introduced our next generation GenDrive products. These next generation fuel cell units include a simplified architecture featuring 30% fewer components, giving customers greater flexibility in managing their deployments. During the year, we received several new orders from Kroger, P&G and Associate Wholesale Grocers. We also experienced add-on orders from Walmart, Coca-Cola, Sysco, Wegmans and BMW.

We continue to develop and monitor future iterations of our products aligned with our evolving product roadmap. According to Fuel Cells Bulletin, an industry publication, Plug Power had 85% world-wide market share in the fuel cell powered material handling industry as of September 2010.

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 service personnel from lift truck dealer networks. 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 2011, all of our GenDrive product installations were in North America.

We shipped 1,024 units and received 2,503 orders for our GenDrive product during the year ending December 31, 2011. Backlog on December 31, 2011 was 1,969 units representing approximately $36.0 million in invoice value. Backlog on December 31, 2010 was 527 units representing approximately $12.8 million in invoice value including approximately $700,000 related to 20 units that were awarded under a government project.

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	2011	2010
Product Shipments	1,024	552
Lease Shipments	-	98
Cancellations/Adjustments	37	20
Orders	2,503	543
Backlog	1,969	527

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., Canada and China.

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, and shipped 10 units representing approximately $130,000 in revenue during that year.

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.

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 2011, the U.S. Patent and Trademark Office (USPTO) issued four new patents to the Company and we have a total of 157 issued patents currently active with the USPTO. At the close of 2011, we had approximately ten U.S. patent applications pending. The number of pending patent applications decreased in 2011 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.

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 was subject to reduction by a maximum of $1 million in the event that the Company did not deliver certain of the assets sold. As of December 31, 2010, $1.0 million was included in assets held for sale and $1.0 million was included in other current liabilities in the consolidated balance sheets. Upon delivery of those certain assets in the quarter ended June 30, 2011 the $1.0 million in consideration was released.

The Company formed a joint venture company based in France with Axane, S.A. under the name Hypulsion to develop and sell hydrogen fuel cell systems for the European material handling market. As part of the formation of Hypulsion, the Company and Hypulsion entered into a License Agreement (the License Agreement) dated as of February 29, 2012 pursuant to which the Company granted a license to Hypulsion of certain intellectual property.

Government Regulation

Our products and their installations are 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.

In addition, product safety standards have been established by the American National Standards Institute (ANSI) covering the overall fuel cell system. The class 1, 2 and 3 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 Compressed Natural Gas Vehicle Fuel Containers or ISO/TS 15869 Gaseous hydrogen and hydrogen blends-Land vehicle fuel tanks . A limited production of our class 1 GenDrive product was approved by a European Notified Body to carry the CE Mark. We will continue to design our GenDrive products to meet ANSI and/or other standards in 2012. We will also pursue the approval to carry the CE Mark for class 1, 2 and 3 GenDrive Products from a European Notified Body. The hydrogen tanks used in these systems will be certified to the Pressure Equipment Directive by a European Notified Body. 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. An addendum to this agreement was signed on June 30, 2011. Under this agreement, Ballard will serve as the exclusive supplier of fuel cell stacks for Plug Power s GenDrive product line for North America and select European countries.

We believe there are a few 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 and Air Squared, Inc. (Air Squared). 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 $5.7 million, $12.9 million and $16.3 million in 2011, 2010 and 2009, respectively. We also had cost of research and development contract revenue of $6.2 million, $6.4 million and $12.4 million in 2011, 2010 and 2009, 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, 2011, we had 195 employees, including 45 temporary 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 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.

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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 $60.6 million in 2007, $121.7 million in 2008, $40.7 million in 2009, $47.0 million in 2010 and $27.5 million in 2011. As of December 31, 2011, we had an accumulated deficit of $754.8 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 manufacturing operations, 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 (i) management must successfully execute our planned path to profitability in the early adoption markets on which we are focused, (ii) the hydrogen infrastructure that is needed to support our growth readiness and cost efficiency must be available and cost efficient, (iii) we must: 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, (iv) we must accurately evaluate our markets for, and react to, competitive threats in both other technologies (such as advanced batteries) and our technology field, and (v) 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 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. To fully execute our future business plans, we expect we will need to raise additional funds 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 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, 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 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 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, 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. 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, 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 focused primarily on research and development of fuel cell systems. In the latter half of 2008, we shifted our focus to viable commercialization of our fuel cell products. 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, and our pending orders may not convert to purchase orders, which may have a material adverse effect on our revenue and cash flow.

Some of the orders we accept from customers require certain conditions or contingencies 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, 2011 totaled 2,503 units. Backlog on December 31, 2011 was 1,969 units. Of the unit orders in backlog on December 31, 2011, orders for 109 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 prospective customers; however, those prospective customers may require certain conditions or contingencies to be satisfied prior to issuing a purchase order to us, some of which are outside of our control. Such conditions or contingencies that may be required to be satisfied before we receive a purchase order may include, but are not limited to, successful product demonstrations or field trials. Some conditions or contingencies that are out of our control may include, but are not limited to, government tax policy, government funding programs, and government incentive programs. Additionally, some conditions and contingencies may extend for several years. We may have to compensate customers, by either reimbursement, forfeiting portions of associated revenue, or other methods depending on the terms of the customer contract, based on the failure on any of these conditions or contingencies. This could have an adverse impact on our revenue and cash flow.

Our GenDrive product depends on the availability of 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 dependent 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.

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 successfully complete the development of GenDrive or any future products we develop that are competitive with competing technologies in terms of price, reliability and longevity, customers 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.

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, generator sets, fast charged technologies and other types of fuel cell technologies. Many of these entities have substantially greater financial, research and development, manufacturing and marketing resources than we do. Technological advances in alternative energy products, 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, 2011, five of our customers comprised approximately 83.0% of the total accounts receivable balance, with each customer individually representing 27.0%, 17.3%, 16.4%, 12.1% and 10.2% of that amount. For the year ended December 31, 2011, contracts with three customers comprise approximately 39.0% of total consolidated revenues, with each customer individually representing 14.5%, 14.0% and 10.5%, of total consolidated revenues, respectively. 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 or future economic conditions 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.

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 2011, the market price of our common stock fluctuated from a high of $10.70 per share in the first quarter of 2011 to a low of $1.35 per share in the third quarter of 2011. 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 and Air Squared, 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.

Two of our stockholders, OJSC Third Generation Company of the Wholesale Electricity Market (OGK-3) and affiliates and associates of AWM Investment Company, including, but not limited to Special Situations Technology Fund, L.P., Special Situations Technology Fund II, L.P. and Special Situations Private Equity Fund, L.P. (collectively, SSF) has substantial control over us and could limit our other stockholders ability to influence the outcome of key transactions, including a change of control.

As of March 29, 2012, OGK-3 and SSF owned approximately 11.8% and 24.0%, respectively, of the outstanding shares of our common stock. As a result, each of OGK-3 and SSF 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 and SSF may differ from the interest of the Company and its other stockholders, and OGK-3 and/or SSF 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. There may be other shareholders who beneficially own significant shares of the Company s common stock such that they may influence or have control over certain Company matters. However, such shareholders have not yet filed reports to disclose their ownership of the Company and we cannot confirm the exact ownership of those shareholders at this time.

In addition, pursuant to the Standstill and Support Agreement, dated as of May 6, 2011, among the Company, OGK-3 and OJSC INTER RAO UES , the owner of a majority of the outstanding equity interests of OGK-3, INTER RAO UES has the right to nominate two members to serve on the Board of Directors of the Company. In October 2011, we increased our board to eight directors and appointed two new directors to serve on the Board of Directors. These two individuals are affiliates of INTER RAO UES and were nominated pursuant to the Standstill and Support Agreement.

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The sale by OGK-3 or SSF 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 held 4,462,693 shares of common stock as of March 29, 2012, which represented in the aggregate approximately 11.8% of the Company s outstanding common stock. SSF held 9,060,000 shares of common stock as of March 29, 2012, which represented in the aggregate approximately 24.0% of the Company s outstanding common stock. If OGK-3 or its affiliates sell substantial amounts of our common stock in the public market, the market price of our common stock could decrease significantly.

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.

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.

For example, we have formed a joint venture company based in France with Axane, S.A. under the name Hypulsion to develop and sell hydrogen fuel cell systems for the European material handling market. However, for the reasons discussed above, Hypulsion may not be able to accomplish its goals or become profitable.

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 may enter into contracts for products that have not yet been developed or produced, which may give such customers the right to terminate their agreements with us.

We may enter into contracts with our customers for certain products that have not been developed or produced. There can be no assurance that we will complete the development of these products and meet the specifications required to fulfill customer agreements and deliver products on schedule. Pursuant to such agreements, the customers would have the right to provide notice to us if, in their good faith judgment, we have materially deviated from such agreements. 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 prospective customer demonstrations could negatively impact demand for our products.

We conduct demonstrations with a number of our prospective customers, and we plan to conduct additional demonstrations for prospective customers as required 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 with these prospective customers could materially harm our reputation and impair market acceptance of, and demand for, our products.

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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.

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

For example, 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 discourage or delay an acquisition that stockholders may consider favorable, which could decrease the value of our common stock.

Our certificate of incorporation, our bylaws, and Delaware corporate law contain provisions that could make it harder for a third party to acquire us without the consent of our board of directors. These provisions include those that: (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.

We are subject to the risks arising from adverse changes in global economic conditions. For example, adverse changes in general economic conditions, continuing economic uncertainties, and 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 prospective 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 2011 fiscal year.

Item 2. Properties

Our principal offices are located in Latham, New York. At our 36-acre campus, we own a 140,000 square foot facility that includes our general office building, our manufacturing facility, and our research and development center. We believe that this facility is sufficient to accommodate our anticipated production volumes for at least the next two years.

Item 3. Legal Proceedings

In July 2008, Soroof Trading Development Company Ltd. (Soroof) 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, Soroof 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, Soroof 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) whether 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 Soroof 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 Soroof dispute.

Item 4. Mine Safety Disclosures

Not applicable.

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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, 2011 and 2010, we issued 133,748 and 90,166 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 29, 2012, there were approximately 2,713 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 41,808. The following table sets forth the high and low sale price per share of our common stock as reported by the NASDAQ Capital Market for the periods indicated:

	Sales prices	
	High	Low
2011		
1st Quarter	$ 10.70	$ 3.60
2nd Quarter	$ 7.80	$ 1.91
3rd Quarter	$ 2.63	$ 1.35
4th Quarter	$ 2.71	$ 1.50
2010		
1st Quarter	$ 7.60	$ 4.90
2nd Quarter	$ 7.30	$ 3.60
3rd Quarter	$ 5.70	$ 3.70
4th Quarter	$ 5.70	$ 3.60

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, 2006 and ending December 31, 2011. 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, 2006 and the reinvestment of all dividends.

Index	2006	2007	2008	2009	2010	2011
PLUG POWER INC.	100.00	101.54	26.22	18.25	9.51	5.24
RUSSELL 300 TECHNOLOGY INDEX	100.00	115.00	65.63	106.70	120.28	118.71
NASDAQ MARKET INDEX	100.00	108.47	66.35	95.38	113.19	113.81

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 2011, 2010, 2009, 2008, and 2007 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,				
	2011	2010	2009	2008	2007
Statements Of Operations:		(in thousands, except per share data)			
Product and service revenue	$ 23,223	$ 15,739	$ 4,833	$ 4,667	$ 3,082
Research and development contract revenue	3,886	3,598	7,460	13,234	13,189
Licensed technology revenue	517	136	-	-	-
Total revenue	27,626	19,473	12,293	17,901	16,271
Cost of product and service revenues	30,670	23,111	7,246	11,442	9,399
Cost of research and development contract revenues	6,232	6,371	12,433	21,505	19,045
Research and development expense	5,656	12,901	16,324	34,987	39,218
Selling, general and administrative expenses	14,546	25,572	15,427	28,333	19,323
Goodwill impairment charge	-	-	-	45,843	-
Gain on sale of assets	(673)	(3,217)	-	-	-
Amortization of intangible assets	2,322	2,264	2,132	2,225	1,614
Other income (expense), net	3,673	570	560	4,734	11,757
Net loss	$ (27,454)	$ (46,959)	$ (40,709)	$ (121,700)	$ (60,571)
Loss per share, basic and diluted	$ (1.46)	$ (3.58)	$ (3.15)	$ (13.62)	$ (6.94)
Weighted average number of common shares outstanding	18,778	13,123	12,911	8,938	8,734
Balance Sheet Data:					
(at end of the period)					
Unrestricted cash, cash equivalents and available-for-sale securities	$ 13,857	$ 21,359	$ 62,541	$ 104,688	$ 165,701
Trading securities auction rate debt securities	-	-	53,397	52,651	-
Total assets	55,656	59,177	164,185	209,112	268,392
Borrowings under line of credit	5,405	-	59,375	62,875	-
Current portion of long-term obligations	-	-	533	401	1,384
Long-term obligations	6,541	1,244	2,426	1,313	4,580
Stockholders' equity	29,036	42,913	88,269	125,864	248,900
Working capital	19,415	23,659	60,009	86,171	163,906

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. We continue to leverage our unique fuel cell application and integration knowledge to identify early adopter markets for which we can design and develop innovative systems and customer solutions that provide superior value, ease-of-use and environmental design. We have made significant progress in our analysis of the material handling market. 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.

In October, 2011 we introduced our next generation GenDrive products. These next generation fuel cell units include a simplified architecture featuring 30% fewer components, giving customers greater flexibility in managing their deployments. During the year, we received several new orders from Kroger, P&G and Associate Wholesale Grocers. We also experienced add-on orders from Walmart, Coca-Cola, Sysco, Wegmans and BMW. We expect continued sales momentum in 2012 with our key target customers.

Effective April 1, 2010, we were no longer considered a development stage enterprise since principal operations began to provide more than insignificant revenues as we received orders from repeat customers, increased our customer base and had a significant backlog. Prior to April 1, 2010, we were 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 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. This restructuring has significantly reduced our operating expenses in 2011.

As of December 31, 2011, we had approximately $19.4 million of working capital, which includes $13.9 million of cash and cash equivalents to fund our future operations. Our future liquidity and capital requirements will depend upon numerous factors, including those identified in Item 1A (Risk Factors) We expect we will need to raise additional capital to fund our operations 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 without external financing. If adequate funds are not available, we may be required to reduce 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.

Recent Developments

Loan and Security Agreement. On August 9, 2011, the Company entered into a revolving credit facility arrangement (the Loan Agreement) with Silicon Valley Bank (SVB) providing availability to an additional $7 million to support working capital needs (See "Liquidity and Capital Resources" for further disclosure on the credit facility with SVB).

On September 28, 2011, the Company executed a First Loan Modification Agreement (the Loan Modification) with Silicon Valley Bank, amending the Loan Agreement. The Loan Modification removed the $750,000 sublimit for outstanding letters of credit, foreign exchange contract financing and amounts utilized for cash management services, making the full $7 million credit facility available for financing accounts receivable and eligible inventory. All remaining terms of the Loan and Security Agreement remain in full force and effect.

Election of Directors. On September 29, 2011, the Board of Directors appointed Douglas T. Hickey to serve as a director of the Company effective as of September 29, 2011. Mr. Hickey previously served on the Company s Board from September 1, 2000 to April 24, 2006.

On October 19, 2011, the Board of Directors appointed Mr. Evgeny Miroshnichenko and Mr. Evgeny Rasskazov to serve as directors of the Company effective as of October 19, 2011. Each of Messrs. Miroshnichenko and Rasskazov was appointed as a director pursuant to the Standstill and Support Agreement dated as of May 6, 2011 among the Company, OJSC INTER RAO UES, (INTER RAO), and OJSC Third Generation Company of the Wholesale Electricity Market, (OGK-3). As of October 19, 2011, OGK-3 directly holds approximately 19.6% of our outstanding common stock, and is a majority-owned subsidiary of INTER RAO. The Standstill and Support Agreement provides that we will appoint two designees of INTER RAO to serve as Class II and Class III directors, with terms expiring at our 2013 and 2014 annual meetings of stockholders, respectively.

On January 24, 2012, the Company entered into a Master and Shareholders' Agreement with Axane, S.A. pursuant to which the Company and Axane formed a joint venture company based in France under the name Hypulsion (the "JV"). The principal purpose of the JV will be to develop and sell hydrogen fuel cell systems for the European material handling market. On February 29, 2012, the Company completed the formation of the JV and the Company and the JV entered into a Contribution and License Agreement and a Supply and Engineered Services Agreement.

On March 23, 2012, the Company and Broadridge Corporate Issuer Solutions, Inc., as rights agent, entered into Amendment No. 3 (the Rights Amendment) to the Shareholders Rights Agreement, dated as of June 23, 2009 (as amended, the Rights Agreement). The Rights Amendment provides that, generally, any beneficial ownership of shares of our common stock by affiliates and associates of AWM Investments Company, including but not limited to Special Situations Technology Fund, L.P., Special Situations Technology Fund II, L.P., and Special Situations Private Equity Fund, L.P., (collectively, SSF) will not cause the preferred stock purchase rights to become exercisable under the Rights Agreement, so long as SSF and their affiliates and associates do not at any time beneficially own shares of our common stock equaling or exceeding three percent more than the percentage of the then outstanding shares of common stock beneficially owned by SSF and their affiliates and associates immediately following the closing of our public offering on March 28, 2012.

On March 28, 2012, the Company completed an underwritten public offering of 13,000,000 shares of common stock. The shares were sold at $1.15 per share for gross proceeds of approximately $15.0 million. Net proceeds, after underwriting discounts and commissions and other estimated fees and expenses payable by the Company, were approximately $13.6 million. The Company intends to use the net proceeds of the offering for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, commercial expenditures, acquisitions of new technologies or businesses that are complementary to its current technologies or business focus, and investments. In connection with the offering, the Company has granted the underwriter a 45-day option to purchase up to an additional 1,950,000 shares of common stock to cover over-allotments.

On March 29, 2012, the Company sold 1,950,000 additional shares of common stock, pursuant to the underwriter s exercise of its over-allotment option in connection with the Company s recently announced public offering, resulting in additional net proceeds to the Company of $2,085,525.

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. See Note 18, 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.

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, 2011 increased $7.5 million, or 47.6%, to $23.2 million from $15.7 million for the year ended December 31, 2010. This increase is primarily related to increased shipments during the current year. In the product and service revenue category, there were 984 fuel cell shipments for the year ended December 31, 2011 as compared to 562 fuel cell systems shipped for the year ended December 31, 2010.

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.

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. We expect to continue certain research and development contract work that is related to our current product development efforts.

Research and development contract revenue for the year ended December 31, 2011 increased $288,000, or 8.0%, to $3.9 million from $3.6 million for the year ended December 31, 2010. The increase is primarily related to two contracts that began in 2011, partially offset by the completion of contracts from prior years. In the research and development category, during the twelve months ended December 31, 2011 we shipped 40 GenDrive fuel cell systems under government programs.

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.

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, 2011 increased $7.6 million, or 32.7%, to $30.7 million from $23.1 million for the year ended December 31, 2010. The increase is directly related to increased fuel cell shipments to end customers. In the cost of product and service revenue category, there were 984 fuel cell shipments for the year ended December 31, 2011 and 562 fuel cell systems shipped for the year ended December 31, 2010. 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 until the second 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, 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. In the cost of product and service revenue category, there were 562 fuel cell system shipments for the year ended December 31, 2010, as compared to 117 for the year ended December 31, 2009. This does not include additional shipments of 98 and 140 fuel cell shipments, respectively, that were being accounted for under a lease arrangement (until Plug Power subsequently sold the lease). Cost recognized on leased products were recorded on the consolidated balance sheets as investment in leased property and depreciated over the lease term. The increase in cost of product and service revenue was also due to 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 until the second quarter of 2010, due to the Company s focus on research and development at that time.

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, 2011 decreased $139,000, or 2.2%, to $6.2 million from $6.4 million for the year ended December 31, 2010. This decrease is primarily related to two new contracts that began in 2011, partially offset by the completion of contracts from prior years.

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.

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, 2011 decreased $7.2 million, or 56.2%, to $5.7 million from $12.9 million for the year ended December 31, 2010. This decline is primarily a result of our 2010 restructuring, which was focused on the commercialization of our GenDrive product. Prior to this restructuring the Company s focus had been on research and development.

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 our 2010 restructuring, and corresponding wind-down of our operations in Plug Power Energy India Private Limited, Plug Power Canada and Plug Power Holland organizations. The decrease was also due to a higher 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 previously included in research and development expense due to the Company s focus on research and development at that time.

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, 2011 decreased $11.0 million, or 43.1%, to $14.6 million from $25.6 million for the year ended December 31, 2010. This decrease was primarily a result of our May 2010 restructuring plan, including $8.1 million in charges recorded in 2010 for this restructuring, and a $2.1 million write-off of assets from Plug Power Canada.

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.

Gain on Sale of Assets. Gain on sale of assets represents the gain on sale of leased assets during 2011, and the sale of inventory, equipment and certain other assets in 2010.

In December, 2010, the Company assigned all of its rights, title and interest in its leased property to Somerset Capital Group, Ltd. (Somerset). Due to contingent provisions in the agreement, the full amount of the sale could not be recognized at the time. During the quarter ended September 30, 2011 the contingent provisions of the agreement were met, and an additional $673,000 was recorded as 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. Accordingly, $3.2 million was recorded to gain on sale of assets in 2010.

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 remained stable at $2.3 million for the years ended December 31, 2011 and December 31, 2010.

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.

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 $248,000 for the year ended December 31, 2011 from $1.1 million for the year ended December 31, 2010. This decrease is primarily related to the sale of trading securities and available-for-sale securities during 2011 and 2010.

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.

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.

Interest and other expense. Interest and other expense consists of interest related to the Loan and Security Agreement, the Credit Line Agreement, long term debt, and foreign currency exchange gain/(loss).

Interest and other expense for the year ended December 31, 2011 was approximately $22,000, compared to approximately $487,000 for the year ended December 31, 2010 The decline is primarily related to the extinguishment of the Credit Line Agreement effective July 1, 2010.

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.

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.

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 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 18, 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.

Product warranty reserve: 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, 2011. The Company s product and service warranty reserve as of December 31, 2011 is approximately $1,211,000 and is included in product warranty reserve in the consolidated balance sheets.

In addition to the standard product warranty, we have entered into certain contracts with customers that include extended warranty and maintenance terms of five to ten years from the date of installation. These contracts are accounted for as a deliverable in accordance with ASU 2009-13, and accordingly, revenue generated from these transactions is deferred and recognized in income over the warranty period. The fair value of the extended warranty and maintenance deliverable has been estimated using the projected cash outflows to meet the obligations in the related contract. Projected cash outflows have been determined using estimated product run hours, failure rates and other assumptions based on the Company s historical experience.

Valuation of long-lived assets: 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. 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. 350-35-30-14, 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.

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 the Company s actual stock prices over an historical period equal to 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 and vesting terms of the associated options.

Risk-free interest rate We use the yield on zero-coupon U.S. Treasury securities having a maturity date 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.

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, 2011, we had an accumulated deficit of approximately $754.8 million. Substantially all of our losses resulted from costs incurred in connection with our manufacturing operations, 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 involved focusing on our GenDrive business and consolidating our operations into our Latham, New York facility, was expected to reduce these losses going forward. This restructuring significantly reduced our operating expenses in 2011.

As of December 31, 2011, we had approximately $19.4 million of working capital, which includes $13.9 million of cash and cash equivalents to fund our future operations. Additionally, on August 9, 2011, we entered into a revolving credit facility arrangement with Silicon Valley Bank (SVB) providing availability to an additional $7 million to support working capital needs. The Loan Agreement will expire on August 8, 2012. See Note 8, Loan and Security Agreement, for additional information regarding the revolving credit facility. On March 28, 2012 and March 29, 2012, the Company completed a public offering of common stock, with net proceeds totaling $15.7 million. See Note 22, Subsequent Events, for additional information regarding the public offering. We believe that our current cash, cash equivalents and cash generated from future sales, in conjunction with the availability of the credit facility, will provide sufficient liquidity to fund operations through the end of 2012. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions. 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. Our ability to achieve profitability and meet future liquidity needs and capital requirements will depend upon numerous factors, including the timing and quantity of product orders and shipments, 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. As a result, we can provide no assurance that we will be able to fund our operations beyond 2012 without additional external financing. We continue to evaluate opportunities to raise additional capital to fund our business beyond 2012. Alternatives the Company would consider include equity or debt financings, strategic alliances or joint ventures. If we are unable to obtain additional capital prior to the end of 2012, we may not be able to sustain our future operations beyond the first quarter of 2013 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 to 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 could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us.

During the year ended December 31, 2011, cash used for operating activities was $33.3 million, consisting primarily of a net loss of $27.5 million offset, in part, by net non-cash expenses in the amount of $2.8 million, including $4.5 million for amortization and depreciation, $1.5 million for stock based compensation, $309,000 for loss on disposal of property, plant and equipment, and a $3.5 million reduction for the change in fair value of common stock warrant liability. Cash provided by investing activities for the year ended December 31, 2011 was $10.3 million, consisting primarily of $10.4 million of maturities (net of purchases) of available-for-sale securities, $525,000 from restricted cash, and $673,000 from the sale of leased assets, offset by $1.3 million used to purchase property, plant and equipment. Cash provided by financing activities for the year ended December 31, 2011 was approximately $25.9 million consisting primarily of $22.6 million in proceeds from the public offering offset by $1.9 million in public offering costs, $5.4 million of proceeds from under line of credit, $158,000 for the purchase of treasury stock and $10,000 in principal payments on long-term debt.

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

	2011	2010	2009
Cash and cash equivalents at end of period	$ 13,857	$ 10,955	$ 14,581
Trading securities - auction rate debt securities at end of period	-	-	53,397
Available-for-sale securities at end of period	-	10,403	47,960
Borrowings under line of credit at end of period	5,405	-	59,375
Working capital at end of period	19,415	23,659	60,009
Net Loss	27,454	46,959	40,709
Net cash used in operating activities	33,310	40,770	38,228
Purchase of property, plant and equipment	1,326	1,100	533

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 (See Note 7, Credit Line Agreement and Auction Rate Debt Securities Repurchase Agreement, of the Consolidated Financial Statements).

Loan and Security Agreement

On August 9, 2011, the Company entered into a loan and security agreement, as amended on September 28, 2011, (the Loan Agreement) with SVB providing that in return for paying an up-front fee of $52,250 the Company has access to up to $7 million of financing in the form of (i) revolving loans, (ii) letters of credit, (iii) foreign exchange contracts and (iii) cash management services such as merchant services, direct deposit of payroll, business credit card and check cashing services. Advances under the Loan Agreement cannot exceed a borrowing base limit calculated using (A) an advanced rate of 80% on the Company's eligible accounts receivable and (B) an advanced rate of 25% on the Company's eligible inventory (subject to a limit of the lesser of (a) $2 million and (b) 30% of all outstanding advances), subject to certain reserves established by SVB and other adjustments.

Interest on advances of credit under the Loan Agreement for: (i) financed accounts receivables is equal to (a) SVB s prime rate, which is currently 3.25% per annum, plus 3.0% per annum or (b) if the Company maintains at all times during any month an adjusted quick ratio of 2.0 to 1.0, then SVB s prime rate plus 1.50% per annum; and (ii) financed inventory is equal to (a) SVB s prime rate plus 5.25% per annum or (b) if the Company maintains at all times during any month an adjusted quick ratio of 2.0 to 1.0, then SVB s prime rate plus 3.25% per annum. The minimum monthly interest charge is $4,000 per month. The Loan Agreement will be used by the Company to support its current working capital needs.

The Loan Agreement is secured by substantially all of the Company's properties, rights and assets, including substantially all of its equipment, inventory, receivables, intellectual property and general intangibles.

The Loan Agreement includes customary representations and warranties for credit facilities of this type. In addition, the Loan Agreement contains a number of covenants that impose significant operating and financial restrictions on the Company's operations, including restrictions pertaining to, among other things: (i) the condition of inventory; (ii) maintenance of an adjusted quick ratio of at least 1.50 to 1.0; (iii) intellectual property right protection and registration; (iv) dispositions of assets; (v) changes in business, management, ownership or business locations; (vi) mergers, consolidations or acquisitions; (vii) incurrence or assumption of indebtedness; (viii) incurrence of liens on any of the Company's property; (ix) paying dividends or making distributions on, or redemptions, retirements or repurchases of, capital stock; (x) transactions with affiliates; and (xi) payments on or amendments to subordinated debt. As of December 31, 2011, the Company is in compliance with all debt covenants.

The Loan Agreement also contains events of default customary for credit facilities of this type with, in some cases, corresponding grace periods, including, (i) failure to pay any principal or interest when due, (ii) failure to comply with covenants, (iii) any material adverse change occurring, (iv) an attachment, levy or restraint on our business, (v) certain bankruptcy or insolvency events , (vi) payment defaults relating to, or acceleration of, other indebtedness or that could result in a material adverse change to the Company's business, (vii) the Company or its subsidiaries becoming subject to judgments, claims or liabilities in an amount individually or in aggregate in excess of $150,000, (viii) any misrepresentations, or (ix) any revocation, invalidation, breach or invalidation of any subordinated debt.

The Loan Agreement will expire on August 8, 2012. The Loan Agreement may be terminated prior to August 8, 2012; however, the Company would be required to pay a $70,000 early termination fee in connection with a termination (i) by the Company for any reason or (ii) by SVB upon notice and after the occurrence and during the continuance of an event of default.

See Note 8, Loan and Security Agreement, of the Consolidated Financial Statements for more detail.

Income Taxes

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 or greater shareholders a change of ownership has occurred under the provisions of IRC Section 382, the Company's Federal and state net operating loss carryforwards could be subject to significant IRC Section 382 limitations.

Based upon an IRC Section 382 study, a Section 382 ownership change occurred in 2011 that resulted in approximately $675 million of Federal and state net operating loss carryforwards being subject to IRC Section 382 limitations and as a result of IRC Section 382 limitations, approximately $618 million of the net operating loss carryforwards will expire prior to utilization. As a result of the IRC Section 382 limitations, these net operating loss carryforwards that will expire unutilized are not reflected in the Company s gross deferred tax asset as of December 31, 2011.

The ownership change also resulted in Net Unrealized Built in Losses per IRS Notice 2003-65 which should result in Recognized Built in Losses during the five year recognition period of approximately $7 million. This will translate into unfavorable book to tax add backs in the Company's 2011 to 2016 U.S. corporate income tax returns that resulted in a gross deferred tax liability of $2.6 million at the time of the ownership change and $1.8 million at December 31, 2011 with a corresponding reduction to the valuation allowance. This gross deferred tax liability will offset certain existing gross deferred tax assets (i.e. capitalized research expense). This has no impact on the Company's current financial position, results of operations, or cash flows because of the full valuation allowance.

Contractual Obligations

Contractual obligations as of December 31, 2011, under agreements with non-cancelable terms are as follows:

	Total	<1 year	1-3 Years	3-5 Years	> 5 Years
Operating lease obligations	2,913,968	730,531	850,297	631,923	701,217
Purchase oligations (A)	6,121,642	6,121,642	-	-	-
Other long-term obligations (B),(C)	114,703	114,703	-	-	-
Line of credit (D)	5,405,110	5,405,110	-	-	-
	$ 14,555,423	$ 12,371,986	$ 850,297	$ 631,923	$ 701,217

(A) During 2010, the Company signed a supply agreement with Ballard Power Systems (Ballard) which continues through December 31, 2014. Under this agreement, Ballard will serve as the exclusive supplier of fuel cell stacks for the GenDrive product line for North America and select European countries. An addendum to this agreement was signed on June 30, 2011. The Company has contractual obligations under this addendum to purchase 3,250 fuel cell stacks between the dates of July 2, 2011 and December 31, 2012. The Company also has contractual obligations related to building maintenance.

(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 17 (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 17 (Commitments and Contingencies) of the Consolidated Financial Statements for more detail.

(D) The Company entered into a revolving credit facility arrangement with Silicon Valley Bank (SVB) on August 9, 2011, which provides availability of up to $7 million to support working capital needs. The Loan Agreement will expire on August 8, 2012. See Note 8 (Loan and Security Agreement) for additional information regarding the revolving credit facility.

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.

As of December 31, 2010, all of the Company s operations had been relocated to the United States. A portion of the Company s total financial performance for 2011 was attributable to activities related to the winding up of operations in both Canada and India. Our exposure to changes in foreign currency rates was primarily related to short-term inter-company transactions with our previous Canadian and Indian subsidiaries and from client receivables in different currencies. As exchange rates vary, the Company s results can be affected.

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

Item 8. Financial Statements and Supplementary Data

The Company s Consolidated Financial Statements included in this report beginning at page F-1 are incorporated in this Item 8 by reference.

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) and 15d-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 Rule 13a-15(f) and 15d-15(f) under the Exchange Act. 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 Organization 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, 2011.

(c) 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

Incorporated herein by reference is the information appearing under the captions Information about our Directors and Section 16(a) Beneficial Ownership Reporting Compliance in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

(b) EXECUTIVE OFFICERS

Incorporated herein by reference is the information appearing under the captions Information about our Executive Officers and Section 16(a) Beneficial Ownership Reporting Compliance in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

(c) CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a Code of Business Conduct and Ethics that applies to all officers, directors, employees and consultants of the Company. The Code of Business Conduct and Ethics is intended to comply with Item 406 of Regulation S-K of the Securities Exchange Act of 1934 and with applicable rules of The NASDAQ Stock Market, Inc. Our Code of Business Conduct and Ethics is posted on our Internet website under the Investor page. Our Internet website address is *www.plugpower.com.* 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.

ITEM 11. EXECUTIVE COMPENSATION

Incorporated herein by reference is the information appearing under the caption Executive Compensation in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

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

Incorporated herein by reference is the information appearing under the caption Principal Stockholders in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table gives information about the shares of Common Stock that may be issued upon the exercise of options, restricted stock and common stock warrants under the Company s 1999 Stock Option and Incentive Plan, as amended (1999 Stock Option Plan), and the Company s 2011 Stock Option and Incentive Plan.

Equity Compensation Plan Information

Plan Category	Number of shares to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of shares remaining for future issuance under equity compensation plans (excluding shares reflected in column (a)) (c)
Equity compensation plans approved by security holders	9,358,331 (1)	$ 4.36	218,885 (2)
Equity compensation plans not approved by security holders	-	-	-
Total	9,358,331	$ 4.36	218,885

(1) Represents 7,128,563 outstanding common stock warrants, 987,572 outstanding options and 280,771 shares of unvested restricted stock issued under the 1999 Stock Option Plan, and 961,425 outstanding options issued under the 2011 Stock Option Plan.

(2) Includes shares available for future issuance under the 2011 Stock Option Plan.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Incorporated herein by reference is the information appearing under the caption Principal Stockholders in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Incorporated herein by reference is the information appearing under the caption Independent Auditors Fees in the Company s definitive Proxy Statement for its 2012 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

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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

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

All other 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.

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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 30, 2012

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints each of Andrew Marsh, Gerald A. Anderson and Gerard L. Conway such person s true and lawful attorney-in-fact and agent with full power of substitution, for such person and in such person s name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Date: March 30, 2012

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.

	Signature	Title	Date
/s/	ANDREW MARSH **Andrew Marsh**	President, Chief Executive Officer and Director (Principal Executive Officer)	March 30, 2012
/s/	GERALD A. ANDERSON **Gerald A. Anderson**	Chief Financial Officer (Principal Financial Officer)	March 30, 2012
/s/	LARRY G. GARBERDING **Larry G. Garberding**	Director	March 30, 2012
/s/	MAUREEN O. HELMER **Maureen O. Helmer**	Director	March 30, 2012
/s/	DOUGLAS T. HICKEY **Douglas T. Hickey**	Director	March 30, 2012
/s/	GEORGE C. McNAMEE **George C. McNamee**	Director	March 30, 2012

/s/	EVGENY MIROSCHNICHENKO	Director	March 30, 2012
	Evgeny Miroschnichenko		
/s/	EVGENY RASSKAZOV	Director	March 30, 2012
	Evgeny Rasskazov		
/s/	GARY K. WILLIS	Director	March 30, 2012
	Gary K. Willis		

Certain exhibits indicated below are incorporated by reference to documents of Plug Power on file with the Commission. Exhibits nos. 10.1, 10.2, 10.4, 10.5 and 10.10 through 10.21 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. (7)
3.2	Third Amended and Restated By-laws of Plug Power Inc. (8)
3.3	Certificate of Amendment to Amended and Restated Certificate of Incorporation of Plug Power Inc. (7)
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. (9)
3.5	Second Certificate of Amendment of Amended and Restated Certificate of Incorporation of Plug Power Inc. (13)
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. (9)
4.3	Amendment No. 1 To Shareholder Rights Agreement. (11)
4.4	Amendment No. 2 To Shareholder Rights Agreement. (17)
4.5	Amendment No. 3 To Shareholder Rights Agreement. (19)
4.6	Form of Warrant. (14)
10.1	Employee Stock Purchase Plan. (2)
10.2	Severance Agreement, dated as of July 12, 2007, by and between Plug Power Inc. and Gerald A. Anderson. (4)
10.3	Executive Severance Agreement, dated as of July 7, 2007, by and between Plug Power Inc. and Gerald A. Anderson. (4)
10.4	Indemnification Agreement, dated as of July 9, 2007, by and between Plug Power Inc. and Gerald A. Anderson. (4)
10.5	Registration Rights Agreement, dated as of June 29, 2006, by and between Plug Power Inc. and Smart Hydrogen Inc. (1)

Exhibit No.	**and Description**
10.6	Form of Indemnification Agreement entered into with each director. (1)
10.7	Plug Power Executive Incentive Plan. (3)
10.8	Employment Agreement, dated as of April 7, 2008, by and between Andrew Marsh and Plug Power Inc. (5)
10.9	Executive Employment Agreement, dated as of May 5, 2008, by and between Gerard L. Conway, Jr. and Plug Power Inc. (6)
10.10	Executive Employment Agreement, dated as of October 28, 2009, by and between Erik J. Hansen and Plug Power Inc. (10)
10.11	Executive Employment Agreement, dated as of February 9, 2010, by and between Adrian Corless and Plug Power Inc. (10)
10.12	Standstill and Support Agreement, dated as of May 6, 2011 among Plug Power Inc., OJSC INTER RAO UES and OJSC Third Generation Company of the Wholesale Electricity Market . (11)
10.13	Master and Shareholders Agreement, dated as of January 24, 2012, by and between Axane S.A. and Plug Power, Inc. (18)
10.14	License Agreement dated as of February 29, 2012, by and between Hypulsion, S.A.S. and Plug Power Inc. (18)
10.15	2011 Stock Option and Incentive Plan. (12)
10.16	Form of Incentive Stock Option Agreement. (15)
10.17	Form of Non-Qualified Stock Option Agreement for Employees. (15)
10.18	Form of Non-Qualified Stock Option Agreement for Independent Directors. (15)
10.19	Form of Restricted Stock Award Agreement. (15)
10.20	Loan and Security Agreement, dated as of August 9, 2011, by and between Plug Power Inc. and Silicon Valley Bank. (15)
10.21	First Loan Modification Agreement, dated as of September 28, 2011, by and between Plug Power Inc. and Silicon Valley Bank. (16)
23.1	Consent of KPMG LLP. (21)
31.1 and 31.2	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (21)
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.(21)

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(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/A (File Number 333-86089).
(3) Incorporated by reference to the Company s current Report on Form 8-K dated February 15, 2007.
(4) Incorporated by reference to the Company s current Report on Form 8-K dated July 9, 2007.
(5) Incorporated by reference to the Company s current Report on Form 8-K dated April 2, 2008.
(6) Incorporated by reference to the Company s Form 10-Q for the period ended June 30, 2008.
(7) Incorporated by reference to the Company s Form 10-K for the period ended December 31, 2008.
(8) Incorporated by reference to the Company s current Report on Form 8-K dated October 28, 2009.
(9) Incorporated by reference to the Company s Registration Statement on Form 8-A dated June 24, 2009.
(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 current Report on Form 8-K dated May 6, 2011.
(12) Incorporated by reference to the Company s current Report on Form 8-K dated May 12, 2011.
(13) Incorporated by reference to the Company s current Report on Form 8-K dated May 19, 2011.
(14) Incorporated by reference to the Company s current Report on Form 8-K dated May 24, 2011.
(15) Incorporated by reference to the Company s Form 10-Q for the period ended June 30, 2011.
(16) Incorporated by reference to the Company s current Report on Form 8-K dated September 28, 2011.
(17) Incorporated by reference to the Company s current Report on Form 8-K dated March 16, 2012.
(18) Incorporated by reference to the Company s current Report on Form 8-K dated March 21, 2012.
(19) Incorporated by reference to the Company s current Report on Form 8-K dated March 26, 2012.
(21) Filed herewith

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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, 2011 and 2010, and the related consolidated statements of operations, cash flows, and stockholders' equity and comprehensive loss for each of the years in the three-year period ended December 31, 2011. In connection with our audits of the consolidated financial statements, we also have audited the consolidated financial statement schedule II, Valuation and Qualifying Accounts. These consolidated financial statements and financial statement schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule 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, 2011 and 2010, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2011, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related consolidated financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

As discussed in Note 18 to the consolidated financial statements, the Company 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 30, 2012

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PLUG POWER INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31, 2011	December 31, 2010
Assets		
Current assets:		
Cash and cash equivalents	$ 13,856,893	$ 10,955,403
Available-for-sale securities	-	10,403,315
Accounts receivable, less allowance of $0 in 2011 and $10,160 in 2010	13,388,909	4,196,361
Inventory	10,354,707	10,539,116
Assets held for sale	-	1,000,000
Prepaid expenses and other current assets	1,894,014	1,584,466
Total current assets	39,494,523	38,678,661
Restricted cash	-	525,000
Property, plant and equipment, net	8,686,840	9,838,631
Investment in leased property, net	-	263,239
Intangible assets, net	7,474,636	9,871,394
Total assets	$ 55,655,999	$ 59,176,925
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 4,668,721	$ 3,560,048
Accrued expenses	3,172,998	4,336,229
Product warranty reserve	1,210,909	862,480
Borrowings under line of credit	5,405,110	-
Current portion long term debt	-	9,956
Deferred revenue	5,542,004	4,349,749
Other current liabilities	80,000	1,901,372
Total current liabilities	20,079,742	15,019,834
Common stock warrant liability	5,320,990	-
Other liabilities	1,219,602	1,243,728
Total liabilities	26,620,334	16,263,562
Stockholders' equity:		
Common stock, $0.01 par value per share; 245,000,000 shares authorized;		
Issued (including shares in treasury):		
22,924,411 at December 31, 2011 and 13,369,924 at December 31, 2010	229,244	133,699
Additional paid-in capital	784,213,871	770,863,164
Accumulated other comprehensive income	928,744	965,868
Accumulated deficit	(754,783,812)	(727,329,858)
Less common stock in treasury, at cost:		
165,906 shares at December 31, 2011 and 180,449 shares at December 31, 2010	(1,552,382)	(1,719,510)
Total stockholders' equity	29,035,665	42,913,363
Total liabilities and stockholders' equity	$ 55,655,999	$ 59,176,925

See accompanying notes to consolidated financial statements.

PLUG POWER INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31, 2011, 2010 and 2009

	Twelve months ended December 31,		
	2011	2010	2009
Product and service revenue	$ 23,223,265	$ 15,738,841	$ 4,832,773
Research and development contract revenue	3,886,114	3,597,870	7,459,783
Licensed technology revenue	516,563	135,938	-
Total revenue	27,625,942	19,472,649	12,292,556
Cost of product and service revenue	30,669,602	23,111,151	7,246,453
Cost of research and development contract revenue	6,232,210	6,370,797	12,433,361
Research and development expense	5,655,748	12,901,170	16,324,373
Selling, general and administrative expenses	14,545,965	25,572,364	15,426,806
Gain on sale of assets	(673,358)	(3,217,594)	-
Amortization of intangible assets	2,322,876	2,263,627	2,132,333
Operating loss	(31,127,101)	(47,528,866)	(41,270,770)
Interest and other income and net realized losses from available-for-sale securities	248,430	1,056,932	1,689,299
Change in fair value of common stock warrant liability	3,447,153	-	-
Change in fair value of auction rate securities repurchase agreement	-	(5,977,822)	(4,246,524)
Net trading gain	-	5,977,822	4,246,524
Interest and other expense and foreign currency gain (loss)	(22,436)	(486,987)	(1,127,081)
Net loss	$ (27,453,954)	$ (46,958,921)	$ (40,708,552)
Loss per share:			
Basic and diluted	$ (1.46)	$ (3.58)	$ (3.15)
Weighted average number of common shares outstanding	18,778,066	13,123,162	12,911,066

Note Share and per share information for the prior periods has been retroactively adjusted to reflect the May 19, 2011 one-for-ten reverse stock split of the Company s common stock.

See accompanying notes to consolidated financial statements.

PLUG POWER INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2011, 2010 and 2009

	Twelve months ended December 31,		
	2011	**2010**	**2009**
Cash Flows From Operating Activities:			
Net loss	$ (27,453,954)	$ (46,958,921)	$ (40,708,552)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation of property, plant and equipment, and investment in leased property	2,322,117	4,969,263	3,634,668
Amortization of intangible assets	2,322,876	2,263,627	2,132,333
Stock-based compensation	1,452,259	1,174,576	1,928,501
Loss on disposal of property, plant and equipment	308,621	86,794	504,397
(Gain) loss on sale of leased assets	(673,358)	290,491	-
Provision for bad debts	-	10,160	92,560
Realized loss on available for sale securities	22,421	-	-
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
Gain on repayable government assistance	-	-	(324,300)
Change in fair value of common stock warrant liability	(3,447,153)	-	-
Changes in operating assets and liabilities:			
Accounts receivable	(9,192,901)	(2,193,325)	65,440
Inventory	1,438,195	(4,409,582)	(95,935)
Prepaid expenses and other current assets	(310,089)	1,624,422	(684,277)
Accounts payable, accrued expenses, product warranty reserve and other liabilities	(1,110,336)	2,618,994	(3,944,407)
Deferred revenue	1,192,255	(246,968)	(828,675)
Net cash used in operating activities	(33,310,067)	(40,770,469)	(38,228,247)
Cash Flows From Investing Activities:			
Purchase of property, plant and equipment	(1,326,144)	(1,100,478)	(532,960)
Investment in leased property, net	-	(2,233,334)	(2,461,526)
Restricted cash	525,000	1,740,405	(2,265,405)
Proceeds from disposal of property, plant and equipment	46,650	121,564	223,000
Proceeds from sale of leased assets	673,358	3,221,168	-
Proceeds from trading securities	-	59,375,001	3,500,000
Proceeds from maturities and sales of available-for-sale securities	10,399,396	79,754,039	137,555,930
Purchases of available-for-sale securities	-	(42,311,734)	(161,803,208)
Net cash provided by (used in) investing activities	10,318,260	98,566,631	(25,784,169)
Cash Flows From Financing Activities:			
Purchase of treasury stock	(158,492)	(441,506)	(534,418)
Proceeds from issuance of common stock and warrants	22,583,877	-	-
Proceeds from stock option exercises and employee stock purchase plan	-	-	76,493
Stock issuance costs	(1,891,378)	-	-

Proceeds (repayment) of borrowings under line of credit	5,405,110	(59,375,000)	(3,500,000)
Proceeds from long-term debt	-	-	1,793,461
Principal payments on long-term debt	(9,956)	(1,561,371)	(229,602)
Net cash provided by (used in) financing activities	25,929,161	(61,377,877)	(2,394,066)
Effect of exchange rate changes on cash	(35,864)	(43,865)	142,965
Increase (decrease) in cash and cash equivalents	2,901,490	(3,625,580)	(66,263,517)
Cash and cash equivalents, beginning of period	10,955,403	14,580,983	80,844,500
Cash and cash equivalents, end of period	$ 13,856,893	$ 10,955,403	$ 14,580,983

See accompanying notes to consolidated financial statements.

PLUG POWER INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY AND COMPREHENSIVE LOSS

For the years ended December 31, 2011, 2010 and 2009

	Common Stock		Additional Paid-	Accumulated Other Comprehensive	Treasury Stock	
	Shares	Amount	in-Capital	Income (Loss)	Shares	Amount
December 31, 2008	12,816,400	$ 1,281,640	$ 765,347,706	$ (359,253)	40,211	$ (743,586)
Net loss	-	-	-	-	-	-
Foreign currency translation gain	-	-	-	1,293,770	-	-
Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains	-	-	-	(131,308)	-	-
Total comprehensive loss						
Stock based compensation	221,900	22,190	2,264,858	-	-	-
Stock issued under employee stock purchase plan	20,824	2,083	196,008	-	-	-
Purchase of treasury stock	-	-	-	-	58,409	(534,418)
December 31, 2009	13,059,124	$ 1,305,913	$ 767,808,572	$ 803,209	98,620	$ (1,278,004)
Net loss	-	-	-	-	-	-
Foreign currency translation gain	-	-	-	276,959	-	-
Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains	-	-	-	(114,300)	-	-
Total comprehensive loss						
Stock based compensation	310,800	31,079	1,851,299	-	-	-
Reclassification adjustment - stock split	-	(1,203,293)	1,203,293	-	-	-
Purchase of treasury stock	-	-	-	-	81,829	(441,506)
December 31, 2010	13,369,924	$ 133,699	$ 770,863,164	$ 965,868	180,449	$ (1,719,510)
Net loss	-	-	-	-	-	-
Foreign currency translation loss	-	-	-	(55,626)	-	-
Unrealized loss on available-for-sale securities, net of reclassification adjustments for realized net losses and gains	-	-	-	18,502	-	-
Total comprehensive loss						
Stock based compensation	221,737	2,217	1,848,330	-	833	(3,030)
Public offering common stock, net	9,332,750	93,328	11,831,027	-	-	-
Issuance of treasury shares	-	-	(328,650)	-	(35,000)	328,650
Purchase of treasury shares	-	-	-	-	19,624	(158,492)
December 31, 2011	22,924,411	$ 229,244	$ 784,213,871	$ 928,744	165,906	$ (1,552,382)

Note Share and per share information for the prior periods has been retroactively adjusted to reflect the May 19, 2011 one-for-ten reverse stock split of the Company s common stock.

See accompanying notes to 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 focused on the design, development, commercialization and manufacture of fuel cell systems for the industrial off-road (forklift or material handling) market.

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.

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. 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.

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.

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.

Liquidity

We have experienced recurring operating losses and as of December 31, 2011, we had an accumulated deficit of approximately $754.8 million. Substantially all of our losses resulted from costs incurred in connection with our manufacturing operations, 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 involved focusing on our GenDrive business and consolidating our operations into our Latham, New York facility, was expected to reduce these losses going forward. This restructuring significantly reduced our operating expenses in 2011.

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

As of December 31, 2011, we had approximately $19.4 million of working capital, which includes $13.9 million of cash and cash equivalents to fund our future operations. Additionally, on August 9, 2011, we entered into a revolving credit facility arrangement with Silicon Valley Bank (SVB) providing availability to an additional $7 million to support working capital needs. The Loan Agreement will expire on August 8, 2012. See Note 8, Loan and Security Agreement, for additional information regarding the revolving credit facility. On March 28, 2012 and March 29, 2012, the Company completed a public offering of common stock, with net proceeds totaling $15.7 million. See Note 22, Subsequent Events, for additional information regarding the public offering. We believe that our current cash, cash equivalents and cash generated from future sales, in conjunction with the availability of the credit facility, will provide sufficient liquidity to fund operations through the end of 2012. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions. 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. Our ability to achieve profitability and meet future liquidity needs and capital requirements will depend upon numerous factors, including the timing and quantity of product orders and shipments, 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. As a result, we can provide no assurance that we will be able to fund our operations beyond 2012 without additional external financing. We continue to evaluate opportunities to raise additional capital to fund our business beyond 2012. Alternatives the Company would consider include equity or debt financings, strategic alliances or joint ventures. If we are unable to obtain additional capital prior to the end of 2012, we may not be able to sustain our future operations beyond the first quarter of 2013 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 to 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 could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us.

Public Offering

Refer to Note 12, Stockholders Equity, for information regarding our 2011 public offering.

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

2. Summary of Significant Accounting Policies

Principles of Consolidation

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

Cash Equivalents

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

Investment Securities

Investment securities as of December 31, 2010 consisted of U.S. Treasury securities. The Company classified these securities as available-for-sale.

Available-for-sale securities are recorded at fair value. 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.

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 the applicable contract. Accounts receivable are stated at the amount billed to customers. 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, and no extended payment agreements have been granted. 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, 2011 and 2010, inventory on consignment was valued at approximately $178,000 and $725,000, respectively.

Intangible Assets

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.

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 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.

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

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 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 collectability 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.

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.

See Note 18, 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 installation. 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, 2011. The Company s product and service warranty as of December 31, 2011 is approximately $1,211,000 and is included in product warranty reserve in the consolidated balance sheets.

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

The Company has also sold products with extended warranties that generally provide for a five to ten year warranty from the date of installation. These types of contacts are accounted for as a deliverable in accordance with ASU No. 2009-13, and accordingly, revenue generated from these transactions is deferred and recognized in income over the warranty period.

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, 2011 and 2010, the Company had unbilled amounts from product and service revenue in the amount of approximately $0 and $107,000, respectively and is included in other current assets in the consolidated balance sheets. At December 31, 2011 and 2010, 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 $0 and $576,000, respectively and is included in other current liabilities in the consolidated balance sheets. At December 31, 2011 and 2010, the Company had deferred product and service revenue in the amount of $5.5 million and $4.3 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. All allowable work performed through the end of each calendar quarter is billed, subject to limitations in the respective contracts. We expect to continue research and development contract work that is directly related to our current product development efforts. At December 31, 2011 and 2010, the Company had unbilled amounts from research and development contract revenue in the amount of approximately $252,000 and $457,000, respectively and is included in other current assets in the consolidated balance sheets. Unbilled amounts at December 31, 2011 are expected to be billed during the first quarter of 2012. At December 31, 2011 and 2010, 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 $0 and $297,000, respectively and is included in other current liabilities in the consolidated balance sheets.

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 undiscounted 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. Fair value is determined through various valuation techniques, including discounted cash flow models, quoted market values and third party independent appraisals, as considered necessary. 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.

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

Stock Split

The financial statements for all prior periods have been retroactively adjusted to reflect the May 19, 2011 one-for-ten reverse stock split of the Company s common stock. See Note 12, Stockholders Equity, for more detail.

Common Stock Warrant Accounting

We account for common stock warrants in accordance with applicable accounting guidance provided in ASC 815, Derivatives and Hedging Contracts in Entity s Own Equity, as either derivative liabilities or as equity instruments depending on the specific terms of the warrant agreement. In compliance with applicable securities law, registered common stock warrants that require the issuance of registered shares upon exercise and do not sufficiently preclude an implied right to cash settlement are accounted for as derivative liabilities. We classify these derivative warrant liabilities on the condensed consolidated balance sheets as a long term liability, which is revalued at fair value at each balance sheet date subsequent to the initial issuance. We use the Black-Scholes pricing model to value the derivative warrant liability. The Black-Scholes pricing model, which is based, in part, upon unobservable inputs for which there is little or no market data, requires the Company to develop its own assumptions. The Company used the following assumptions for its common stock warrants. The risk-free interest rate for May 31, 2011 (issuance date) and December 31, 2011 were .75% and .33%, respectively. The volatility of the market price of the Company s common stock for May 31, 2011 (issuance date) and December 31, 2011 were 94.4% and 78.6%, respectively. The expected average term of the warrant used for both periods was 2.5 years. There was no expected dividend yield for the warrants granted. As a result, if factors change and different assumptions are used, the warrant liability and the change in estimated fair value could be materially different. Changes in the fair value of the warrants are reflected in the consolidated statement of operations as change in fair value of common stock warrant liability.

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.

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

Research and Development

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

Stock-Based Compensation

The Company maintains employee stock-based compensation plans, which are described more fully in Note 13, 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 Cost of product and service revenue , 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, based upon 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. Excess tax benefits are recognized in the period in which the tax deduction is realized through a reduction of taxes payable. No tax benefit or expense for stock-based compensation has been recorded during the years ended December 31, 2011, 2010 and 2009 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. 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 common stock 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. All share information for the prior periods has been retroactively adjusted to reflect the May 19, 2011 one-for-ten reverse stock split of the Company s common stock.

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

	Year Ended December 31,		
	2011	2010	2009
Numerator:			
Net loss	$ (27,453,954)	$ (46,958,921)	$ (40,708,552)
Denominator:			
Weighted average number of common shares outstanding	18,778,066	13,123,162	12,911,066

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

The dilutive potential common shares are summarized as follows:

	At December 31,		
	2011	2010	2009
Stock options outstanding	1,948,997	432,846	598,129
Unvested restricted stock	280,771	437,958	868,267
Common stock warrants	7,128,563	57,143	57,143
Number of dilutive potential common shares	9,358,331	927,947	1,523,539

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

See Note 22, Subsequent Events, of the Consolidated Financial Statements for an evaluation of subsequent events and transactions through the date of this filing.

Recent Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2011-04, Fair Value Measurement (Topic 820), which provides common fair value measurement and disclosure requirements in accordance with GAAP and International Financial Reporting Standards (IFRS). The amendments explain how to measure fair value and will improve the comparability of fair value measurement presented and disclosed in financial statements prepared in accordance with GAAP and IFRS. This authoritative guidance is to be applied prospectively and is effective during interim and annual periods beginning after December 15, 2011. The Company is currently evaluating the impact, if any, of this new accounting update and plans to adopt this new standard on January 1, 2012 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 June and December 2011, the FASB issued ASU No. 2011-05 and ASU No. 2011-12, Comprehensive Income(Topic 220), requiring entities to present net income and other comprehensive income in either a single continuous statement or in two separate, but consecutive, statements of net income and other comprehensive income. This authoritative guidance eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholder s equity. This authoritative guidance is to be applied retrospectively and is effective for fiscal years, and interim periods within those years, beginning after December 15, 2011. The Company does not believe the 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.

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

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

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

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

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

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

As of December 31, 2011, 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.

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

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

Balance at December 31, 2011	Total	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Common stock warrant liability	$ 5,320,990	$-	$-	$5,320,990

Balance at December 31, 2010	Total	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Available-for-sale securities - U.S. treasury securities	$ 10,403,315	$10,403,315	$-	$-

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):

Common stock warrant liability	Fair Value Measurement Using Significant Unobservable Inputs
Beginning of period - January 1, 2011	$ -
Issuance of common stock warrants	8,768,143
Change in fair value of common stock warrants	(3,447,153)
Fair value of common stock warrant liability at December 31, 2011	$ 5,320,990

Trading securities - auction rate debt securities	Fair Value Measurement Using Significant Unobservable Inputs
Beginning of period - January 1, 2010	$ 53,397,179
Sale of trading securities for the year ended December 31, 2010	(59,375,001)
Net trading gain for the year ended December 31, 2010	5,977,822
Fair value of trading securities - auction rate debt securities at December 31, 2010	$ -

Fair Value

Auction rate debt securities repurchase agreement	Measurement Using Significant Unobservable Inputs
Beginning of period - January 1, 2010	$ 5,977,822
Change in fair value of auction rate debt securities repurchase agreement for the year ended December 31, 2010	(5,977,822)
Fair value of auction rate debt securities repurchase agreement at December 31, 2010	$ -

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

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

Available-for-sale securities (Level 1): Available-for-sale securities represent U.S. treasury securities, where fair value is based on quoted market prices.

Common stock warrant liability (Level 3): For our common stock warrants, fair value is based on the Black-Scholes pricing model which is based, in part, upon unobservable inputs for which there is little or no market data, requiring the Company to develop its own assumptions.

Trading securities auction rate debt securities and auction rate debt securities repurchase agreement (Level 3): 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

There were no available-for-sale securities as of December 31, 2011. The amortized cost and fair value of the Company s available-for-sale securities as of December 31, 2010 were as follows:

Balance at December 31, 2010	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Treasury Securities	$ 10,421,817	$ -	$ 18,502	$ 10,403,315

The above table includes two securities where the current fair value was less than the related amortized cost at December 31, 2010. These unrealized losses did not reflect any deterioration of the credit worthiness of the issuers of the securities. All securities were investment grade. The unrealized losses on these temporarily impaired securities was a result of changes in interest rates for fixed-rate securities where the interest rate received was 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 were 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:

	2011	2010	2009
Proceeds on sales	$ -	$ 14,975,693	$ 3,699,149

Proceeds on maturities		-	64,778,346	133,856,781
Gross realized gains	-	-	-	
Gross realized losses	-	-	-	

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

5. Property, Plant and Equipment

Property, plant and equipment at December 31, 2011 and 2010 consist of the following:

	December 31, 2011	December 31, 2010
Land	$ 90,000	$ 90,000
Buildings	15,332,232	14,557,080
Building improvements	4,939,283	6,843,954
Software, machinery and equipment	13,941,438	13,608,624
	34,302,953	35,099,658
Less accumulated depreciation	(25,616,113)	(25,261,027)
Property, plant, and equipment, net	$ 8,686,840	$ 9,838,631

Depreciation expense was $2.1million, $5.0 million and $3.6 million for the years ended December 31, 2011, 2010 and 2009, 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. Intangible Assets

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 eight 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, 2011 are as follows:

	Weighted Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Effect of Foreign Currency Translation	Total
Acquired Technology	8 years	$15,900,000	$ (9,974,597)	$ 1,132,529	$ 7,057,932
Customer Relationships	8 years	1,000,000	(583,296)	-	416,704
		$16,900,000	$ (10,557,893)	$ 1,132,529	$ 7,474,636

The gross carrying amount and accumulated amortization of the Company s acquired identifiable intangible assets as of December 31, 2010 are as follows:

	Weighted Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Effect of Foreign Currency Translation	Total

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
		$16,900,000	$ (8,235,017)	$ 1,206,411	$ 9,871,394

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

Amortization expense for acquired identifiable intangible assets for the years ended December 31, 2011, 2010, and 2009 was $2.3 million, $2.3 million, and $2.1 million, respectively. Estimated amortization expense for subsequent years is as follows:

2012	$ 2,277,773
2013	2,277,773
2014	2,277,773
2015	641,317
Total	$ 7,474,636

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 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.

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. Loan and Security Agreement

On August 9, 2011, the Company entered into a loan and security agreement, as amended on September 28, 2011, (the Loan Agreement) with Silicon Valley Bank (SVB) providing that in return for paying an up-front fee of $52,250 the Company has access to up to $7 million of financing in the form of (i) revolving loans, (ii) letters of credit, (iii) foreign exchange contracts and (iv) cash management services such as merchant services, direct deposit of payroll, business credit card and check cashing services. Advances under the Loan Agreement cannot exceed a borrowing base limit calculated using (A) an advanced rate of 80% on the Company's eligible accounts receivable and (B) an advanced rate of 25% on the Company's eligible inventory (subject to a limit of the lesser of (a) $2 million and (b) 30% of all outstanding advances), subject to certain reserves established by SVB and other adjustments.

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

Interest on advances of credit under the Loan Agreement for: (i) financed accounts receivables is equal to (a) SVB s prime rate, which is currently 3.25% per annum, plus 3.0% per annum or (b) if the Company maintains at all times during any month an adjusted quick ratio of 2.0 to 1.0, then SVB s prime rate plus 1.50% per annum; and (ii) financed inventory is equal to (a) SVB s prime rate plus 5.25% per annum or (b) if the Company maintains at all times during any month an adjusted quick ratio of 2.0 to 1.0, then SVB s prime rate plus 3.25% per annum. The minimum monthly interest charge is $4,000 per month. The Loan Agreement will be used by the Company to support its current working capital needs.

The Loan Agreement is secured by substantially all of the Company's properties, rights and assets, including substantially all of its equipment, inventory, receivables, intellectual property and general intangibles.

The Loan Agreement includes customary representations and warranties for credit facilities of this type. In addition, the Loan Agreement contains a number of covenants that impose significant operating and financial restrictions on the Company's operations, including restrictions pertaining to, among other things: (i) the condition of inventory; (ii) maintenance of an adjusted quick ratio of at least 1.50 to 1.0; (iii) intellectual property right protection and registration; (iv) dispositions of assets; (v) changes in business, management, ownership or business locations; (vi) mergers, consolidations or acquisitions; (vii) incurrence or assumption of indebtedness; (viii) incurrence of liens on any of the Company's property; (ix) paying dividends or making distributions on, or redemptions, retirements or repurchases of, capital stock; (x) transactions with affiliates; and (xi) payments on or amendments to subordinated debt. As of December 31, 2011, the Company is in compliance with these covenants.

The Loan Agreement also contains events of default customary for credit facilities of this type with, in some cases, corresponding grace periods, including, (i) failure to pay any principal or interest when due, (ii) failure to comply with covenants, (iii) any material adverse change occurring, (iv) an attachment, levy or restraint on our business, (v) certain bankruptcy or insolvency events, (vi) payment defaults relating to, or acceleration of, other indebtedness or that could result in a material adverse change to the Company's business, (vii) the Company or its subsidiaries becoming subject to judgments, claims or liabilities in an amount individually or in aggregate in excess of $150,000 (viii) any misrepresentations, or (ix) any revocation, invalidation, breach or invalidation of any subordinated debt. As of December 31, 2011, the Company is in compliance with all debt covenants.

The Loan Agreement will expire on August 8, 2012. The Loan Agreement may be terminated prior to August 8, 2012; however, the Company would be required to pay a $70,000 early termination fee in connection with a termination (i) by the Company for any reason or (ii) by SVB upon notice and after the occurrence and during the continuance of an event of default.

As of December 31, 2011 $5,405,110 was outstanding under the loan agreement and was recorded as borrowings under line of credit on the consolidated balance sheets.

In September 2011, the Company signed a letter of credit with Silicon Valley 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. There are no collateral requirements associated with this letter of credit.

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

9. Accrued Expenses

Accrued expenses at December 31, 2011 and 2010 consist of:

	2011	2010
Accrued payroll and compensation related costs	$ 1,687,965	$ 869,545
Accrued restructuring costs	109,978	1,392,568
Accrued dealer commissions and customer rebates	132,850	492,700
Accrued software costs	-	542,500
Other accrued liabilities	1,242,205	1,038,916
Total	$ 3,172,998	$ 4,336,229

10. 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 and revisions to previous estimates in the amount of $452,054 and $8,096,868 within selling, general and administrative expenses in the consolidated statement of operations for the years ended December 31, 2011 and December 31, 2010, respectively.

The accrued restructuring charges relating to the May 2010 restructuring are comprised of the following at December 31, 2011:

	Accrued restructuring charges at January 1, 2011	Adjustments to, additional accrued restructuring charges, or non-cash charges	Cash payments	Accrued restructuring charges at December 31, 2011
Net lease obligations	$ 687,696	$ 452,054	$ (1,139,750)	$ -
Total	$ 687,696	$ 452,054	$ (1,139,750)	$ -

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 ($220,000), ($504,847) and $210,038 within selling, general and administrative expenses in the consolidated statement of operations for the years ended December 31, 2011, December 31, 2010 and December 31, 2009, respectively. At December 31, 2011, $109,978 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, 2011:

	Restructuring charges at January 1, 2011	Additional accrued restructuring charges, or non-cash charges	Cash payments	Restructuring charges at December 31, 2011
Contract cancellations	$ 547,356	$ (220,000)	$ (217,378)	$ 109,978
Net lease obligations	157,516	-	(157,516)	-

Total	$ 704,872	$ (220,000)	$ (374,894)	$ 109,978

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

11. Income Taxes

The components of (loss) before income taxes and the provision for income taxes for the years ended December 31, 2011, 2010 and 2009 are as follows:

Loss before income taxes:	2011	2010	2009
United States	$ (25,483,000)	$ (38,567,000)	$ (39,363,000)
Foreign	(1,971,000)	(8,392,000)	(1,346,000)
	$ (27,454,000)	$ (46,959,000)	$ (40,709,000)

There was no current income tax expense for the years ended December 31, 2011, 2010 and 2009. 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 expense (benefit) for the years ended December 31, 2011, 2010 and 2009 are as follows:

	2011	2010	2009
Deferred tax expense (benefit)	$ 17,774,374	$ (652,367)	$ (1,679,144)
Net operating loss carryforward expired (generated)	187,596,630	(14,168,304)	(14,972,768)
Valuation allowance (decrease) increase	(205,371,004)	14,820,671	16,651,912
Provision for Income taxes	$ -	$ -	$ -

The significant components of Foreign deferred income tax expense (benefit) for the years ended December 31, 2011, 2010 and 2009 are as follows:

	2011	2010	2009
Deferred tax benefit	$ (1,268,116)	$ (822,713)	$ (1,633,336)
Net operating loss carryforward expired (generated)	496,400	(1,080,779)	147,019
Valuation allowance increase	771,716	1,903,492	1,486,317
Provision for Income taxes	$ -	$ -	$ -

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

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

	2011	2010	2009
U.S. Federal statutory tax rate	(35.0%)	(35.0%)	(35.0%)
Deferred state taxes, net of federal benefit	(3.1%)	(2.4%)	(2.9%)
Common stock warrant liability	(4.4%)	0.0%	0.0%
Other, net	0.6%	(2.7%)	(0.8%)
Change to uncertain tax positions	(57.5%)	1.6%	0.0%
Foreign tax rate differential	0.8%	2.2%	0.2%
Expiring attribute carryforward	5.4%	1.2%	0.0%
Adjustments to open deferred tax balance	(1.7%)	0.3%	(4.3%)
Writeoff of tax attributes due to imposition of Section 382 limitation	840.9%	0.0%	0.0%
Tax credits	(0.3%)	(0.6%)	0.7%
Change in valuation allowance	(745.7%)	35.4%	42.1%
	0.0%	0.0%	0.0%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of certain assets and liabilities for financial reporting and the amounts used for income tax expense purposes. Significant components of the Company s deferred tax assets and liabilities as of December 31, 2011 and 2010 are as follows:

	U.S. Years ended December 31,		Foreign Years ended December 31,	
	2011	2010	2011	2010
Intangible assets	$ 199,980	$ 270,278	$ 324,654	$ (28,763)
Non-employee stock based compensation	(1,555,822)	(1,792,727)	-	-
Gain on auction rate debt securities repurchase agreement	-	(2,271,572)	-	-
Impairment loss on available-for-sale securities	-	2,271,572	-	-
Deferred revenue	2,105,962	1,652,905	-	-
Other reserves and accruals	1,120,831	669,061	-	206,184
Capital loss carryforwards	-	5,883,890	-	-
Research and development tax credit carryforwards	73,722	9,833,063	1,533,281	1,512,346
Property, plant and equipment	1,126,531	753,930	528,596	521,379
Amortization of stock-based compensation	7,900,080	7,490,246	-	-
Capitalized research & development expenditures	15,162,000	17,328,000	4,759,800	3,667,068
Section 382 recognized built in loss	(1,819,014)	-	-	-
Net operating loss carryforwards	30,271,381	217,868,010	3,462,252	3,958,652
Total deferred tax asset	54,585,651	259,956,656	10,608,583	9,836,866
Valuation allowance	(54,585,651)	(259,956,656)	(10,608,583)	(9,836,866)
Net deferred tax assets	$ -	$ -	$ -	$ -

The Company has recorded a valuation allowance, as a result of uncertainties related to the realization of its net deferred tax asset, at December 31, 2011 and 2010 of approximately $65.2 million and $269.8 million, respectively. A reconciliation of the current year change in valuation allowance is as follows:

	Total	U.S.	Foreign
Increase in valuation allowance for current year increase in net operating losses:	$ 8,982,432	$ 8,799,089	$ 183,343
Decrease in valuation allowance for 382 limitations on tax attributes:	(212,112,671)	(212,112,671)	-
Decrease in valuation allowance for current year net decrease in deferred tax assets other than net operating losses:	(2,279,655)	(2,057,422)	(222,233)
Increase in valuation allowance as a result of foreign currency fluctuation	136,168	-	136,168
Increase in valuation allowance due to current year change of deferred tax assets as the result of uncertain tax positions.	674,438	-	674,438
Net (decrease) increase in valuation allowance	$ (204,599,288)	$ (205,371,004)	$ 771,716

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

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, 2011 and December 31, 2010 are $1.9 million and $14.3 million, respectively 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.

Before the imposition of IRC Section 382 limitations described below, at December 31, 2011, the Company has unused Federal and State net operating loss carryforwards of approximately $703 million, of which $70.3 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 $585.9 million was generated by the Company during the period October 1, 1999 through December 31, 2011. The net operating loss carryforwards if unused will expire at various dates from 2012 through 2031. In 2011, net operating loss carryforwards of $3.9 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 or greater shareholders a change of ownership has occurred under the provisions of IRC Section 382, the Company's Federal and state net operating loss carryforwards could be subject to significant IRC Section 382 limitations.

Based upon an IRC Section 382 study, a Section 382 ownership change occurred in 2011 that resulted in approximately $675 million of Federal and state net operating loss carryforwards being subject to IRC Section 382 limitations and as a result of IRC Section 382 limitations, approximately $618 million of the net operating loss carryforwards will expire prior to utilization. As a result of the IRC Section 382 limitations, these net operating loss carryforwards that will expire unutilized are not reflected in the Company s gross deferred tax asset as of December 31, 2011.

The ownership change also resulted in Net Unrealized Built in Losses per IRS Notice 2003-65 which should result in Recognized Built in Losses during the five year recognition period of approximately $7 million. This will translate into unfavorable book to tax add backs in the Company's 2011 to 2016 U.S. corporate income tax returns that resulted in a gross deferred tax liability of $2.6 million at the time of the ownership change and $1.8 million at December 31, 2011 with a corresponding reduction to the valuation allowance. This gross deferred tax liability will offset certain existing gross deferred tax assets (i.e. capitalized research expense). This has no impact on the Company's current financial position, results of operations, or cash flows because of the full valuation allowance.

IRC Section 382 also limits the ability for a Company to utilize capital loss and research credit carryforwards. Approximately $15.5 million of Federal capital loss carryforwards are subject to IRC Section 382 limitations and as a result of the IRC Section 382 limitations, the entire $15.5 million will expire prior to utilization. Approximately $15.5 million of Research Credit are subject to IRC Section 382 limitations and as a result of the IRC Section 382 limitations, the entire $15.5 million will expire prior to utilization. At December 31, 2011 the Company has US Federal Research and Experimentation credit carryforwards of approximately $0.1 million that were generated after the IRC Section 382 ownership change and will be available to offset future income tax that will expire in 2031.

At December 31, 2011, the Company has unused foreign net operating loss carryforwards of approximately $17.4 million. The net operating loss carryforwards if unused will expire at various dates from 2014 through 2031. At December 31, 2011 the company has Scientific Research and Experimental Development expenditures of $21.8 million available to offset future taxable income. These expenditures have no expiry date. At December 31, 2011 the company has Canadian ITC credit carryforwards of $2.4 million available to offset future income tax. These credit carryforwards if unused will expire at various dates from 2012 through 2027. Approximately $3.6 million of the foreign net operating loss carryforwards, approximately $2.8 million of the Scientific Research and Experimental Development expenditures and $0.8 million 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, 2011.

The Company intends to reinvest indefinitely any unrepatriated foreign earnings. As of December 31, 2011, the Company has no unrepatriated foreign earnings.

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

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

	2011	2010	2009
Unrecognized tax benefits balance at beginning of year	$ 17,893,011	$ 18,570,177	$ 18,149,125
Additions for tax positions of prior years	-	-	-
Reductions based on tax positions related to the current year	-	-	-
Reductions for tax positions of prior years	(15,874,599)	(716,419)	(55,884)
Settlements	-	-	-
Currency Translation	27,940	39,253	476,936
Unrecognized tax benefits balance at end of year	$ 2,046,352	$ 17,893,011	$ 18,570,177

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, 2011, the Company recognized $0 in interest and penalties. The Company had $1.2 million in interest and penalties accrued at December 31, 2011.

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 2008 to 2011. Open tax years in the foreign jurisdictions range from 2004 to 2011. 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, 2011, 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.

12. Stockholders Equity

On May 19, 2011, the Company implemented a one-for-ten reverse stock split of its common stock. As a result of the reverse stock split, each ten (10) outstanding shares of pre-split common stock were automatically combined into one (1) share of post-split common stock. Fractional shares received cash and proportional adjustments were made to the Company s outstanding stock options and other equity awards and to the Company s equity compensation plans to reflect the reverse stock split. The financial statements for all prior periods have been retroactively adjusted to reflect this stock split for both common stock issued and options outstanding.

On May 31, 2011, the Company completed an underwritten public offering of 8,265,000 shares of its common stock and warrants to purchase an aggregate of 7,128,563 shares of common stock (including warrants to purchase an aggregate of 929,813 shares of common stock purchased by the underwriter pursuant to the exercise of its over-allotment option). The shares and the warrants were sold together as a fixed combination, with each combination consisting of one share of common stock and 0.75 of a warrant to purchase one share of common stock, at a price to the public of $2.42 per fixed combination. Net proceeds, after underwriting discounts and commissions and other fees and expenses payable by Plug Power, were $18,289,883 (of this amount $8,768,143 in fair value was recorded as common stock warranty liability at issuance date). The warrants are exercisable upon issuance and will expire on May 31, 2016. The exercise price of the warrants is $3.00 per share of common stock. The warrants include weighted-average anti-dilution protection and, in the event of a sale of the Company, and under certain conditions, each warrant holder has the right to require the Company to purchase such holder s warrants at a price determined using a Black-Scholes option pricing model.

On June 8, 2011, the Company sold 836,750 additional shares of common stock, pursuant to the underwriter s partial exercise of its over-allotment option, resulting in additional net proceeds to Plug Power of $1,874,990.

On July 1, 2011, the Company sold 231,000 additional shares of common stock, pursuant to the underwriter s partial exercise of its over-allotment option, resulting in additional net proceeds to Plug Power of $527,626.

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

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, 2011 and 2010, 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, 2011 and 2010, 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, 2011 and 2010 there were 22,758,505 and 13,189,475, respectively shares of common stock issued and outstanding.

13. 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, which ever 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, 0 and 208,240 shares of stock under the Plan during 2011, 2010 and 2009, 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 non-vested stock and 85% of a six-month stock option. The value of the non-vested 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.

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

2011 Stock Option and Incentive Plan

On May 12, 2011, the Company s stockholders approved the 2011 Stock Option and Incentive Plan (the 2011 Plan). The 2011 Plan provides for the issuance of up to a maximum number of shares of common stock equal to the sum of (i) 1,000,000, plus (ii) the number of shares of common stock underlying any grants pursuant to the 2011 Plan or the Plug Power Inc. 1999 Stock Option and Incentive Plan that are forfeited, canceled, repurchased or are terminated (other than by exercise). The shares may be issued pursuant to stock options, stock appreciation rights, restricted stock awards and certain other equity-based awards granted to employees, directors and consultants of the Company. No grants may be made under the 2011 Plan after May 12, 2021. Equity awards granted prior to May 12, 2011, were made under the 1999 Stock Option and Incentive Plan.

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

At December 31, 2011 there were approximately 1.9 million options granted and outstanding and 219,000 options available to be issued under the 2011 Stock Option Plan. The 2011 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 three 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 2011 Stock Option Plan have vesting provisions ranging from immediate vesting to three years in duration and expire ten years after issuance.

Compensation cost associated with employee stock options represented approximately $952,000 of the total share-based payment expense recorded for the year ended December 31, 2011. The Company estimates the fair value of stock options and shares issued under the employee stock purchase plan using a Black-Scholes valuation model, and the resulting fair value is recorded as compensation cost on a straight-line basis over the option vesting period. Key inputs and assumptions used to estimate the fair value of stock options include the grant price of the award, the expected option term, volatility of the Company s stock, an appropriate risk-free rate, and the Company s dividend yield. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by employees who receive equity awards, and subsequent events are not indicative of the reasonableness of the original estimates of fair value made by the Company. The assumptions made for purposes of estimating fair value under the Black-Scholes model for the 1,618,400, 150,000 and 1,375,500 options granted during the years ended December 31, 2011, 2010 and 2009, respectively were as follows:

	2011	**2010**	**2009**
Dividend yield:	0%	0%	0%
Expected term of options (years):	6	6	6
Risk free interest rate:	1.16%-2.61%	1.52%-2.93%	1.79%-2.80%
Volatility:	74%-79%	94%-95%	85%-89%

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 from the Company s actual historic stock prices over the past six years, which represents the Company s best estimate of expected volatility.

A summary of stock option activity for the year December 31, 2011 is as follows:

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Instrinsic Value
Options outstanding at December 31, 2010	432,846	$ 43.16	5.3	$ -
Granted	1,618,400	3.71	10.0	-
Exercised	-	-	-	-
Forfeited	(39,578)	-	-	-
Expired	(62,671)	-	-	-
Options outstanding at December 31, 2011	1,948,997	$ 9.84	8.8	-
Options exercisable at December 31, 2011	339,536	38.72	5.0	-
Options unvested at December 31, 2011	1,609,461	3.74	9.6	-

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

The weighted average grant date fair value of options granted during the years ended December 31, 2011, 2010 and 2009 was $3.58, $3.80 and $6.60, respectively. There were no stock options exercised during the year ended December 31, 2011. As of December 31, 2011, there was approximately $3,384,000 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, 2011 and 2010 was approximately $952,000 and $247,000, respectively.

Restricted stock awards vest in equal installments over a period of one to three 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 $10,000 associated with its restricted stock awards in 2011. As of December 31, 2011, there was no 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, 2011 is as follows:

	Shares	Aggregate Intrinsic Value
Unvested restricted stock at December 31, 2010	437,958	$ 893,434
Granted	50,942	103,922
Forfeited	(157,187)	(320,661)
Vested	(50,942)	(103,922)
Unvested restricted stock at December 31, 2011	280,771	$ 572,773

For the years ended December 31, 2011, 2010, and 2009, the Company recorded expense of approximately $1.5 million, $1.2 million, and $1.9 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 133,748, 90,166 and 60,755 shares of common stock to the Plug Power Inc. 401(k) Savings & Retirement Plan during 2011, 2010 and 2009, respectively. These shares have been adjusted to reflect the May 19, 2011 one-for-ten stock split of the Company s common stock.

The Company s expense for this plan, including the issuance of shares, was approximately $374,000, $441,000 and $534,000 for years ended December 31, 2011, 2010 and 2009, respectively.

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.

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.

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

In the event stretch revenue and EBITDAS metrics are reached during the next year of the grant period ending December 31, 2012, the Company could issue a maximum of 280,771 shares to LTI Plan participants, currently representing approximately 1.2% of total outstanding shares. Restrictions on these shares only lapse in the event the Company performs at the articulated performance metrics.

In 2011 and 2010, no threshold, target or stretch revenue and EBITDAS performance-based metrics were reached. Accordingly, no restrictions have lapsed, and 20% and 25% of the total awarded RSUs were forfeited for the 2011 and 2010 fiscal years, respectively. Therefore, no expense was recorded during the years ended December 31, 2011 and December 31, 2010, respectively, associated with these awards.

14. 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, 2011 and 2010, the Company had no payables due to DTE under this commission provision and no outstanding receivables from DTE.

15. 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). 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, accounts 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)

16. 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, 2011, 2010 and 2009:

	2011	2010	2009
Stock-based compensation accrual impact, net	$ 395,257	$ 707,802	$ 480,145
Change in unrealized loss/gain on available for sale securities	18,502	(114,300)	(131,308)
Cash paid for interest	12,634	471,386	999,665
Transfer of property, plant and equipment to assets held for sale	-	768,779	-
Transfer of investment in leased property to inventory	253,786	-	-

17. Commitments and Contingencies

Alliances and development agreements

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 was 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, 2011 and 2010, approximately $110,000 and $209,000, respectively, have been recorded as accrued expenses in the consolidated balance sheets related to the development collaboration agreement.

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. For the years ended December 31, 2011 and December 31, 2010, amounts payable under this agreement were approximately $5,000 and $4,000, respectively.

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

Leases

As of December 31, 2011 and 2010, the Company has no capital leases outstanding. The Company has several non-cancelable operating leases, primarily for hydrogen infrastructure and fork lift trucks 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 non-cancelable operating leases (with initial or remaining lease terms in excess of one year) as of December 31, 2011 are:

Year ending December 31,	Operating leases
2012	$ 730,531
2013	522,557
2014	327,740
2015	316,823
2016 and thereafter	1,016,317
Total future minimum lease payments	$ 2,913,968

Minimum future rental income receivable under subleases from non-cancelable operating leases were $0 and $153,932 as of December 31, 2011 and 2010, respectively.

Rental expense for all operating leases for the years ended December 31, 2011, 2010 and 2009 were as follows:

	2011	2010	2009
Minimum rentals	$ 887,000	$ 2,153,000	$ 1,819,000
Sublease rental income	(161,000)	(269,000)	(5,000)
	$ 726,000	$ 1,884,000	$ 1,814,000

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, 2011, five customers comprise approximately 83.0% of the total accounts receivable balance, with each customer individually representing 27.0%, 17.3%, 16.4%, 12.1% and 10.2% of total accounts receivable, respectively. 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.

For the year ended December 31, 2011, contracts with three customers comprise approximately 39.0% of total consolidated revenues, with each customer individually representing 14.5%, 14.0% and 10.5%, of total consolidated revenues, respectively. For the year ended December 31, 2010, contracts with two customers and one federal government agency comprised 42.0% of total consolidated revenues, with each customer individually representing 18.7%, 10.0% and 13.3% of total consolidated revenues, respectively.

The Company has cash deposits in excess of federally insured limits. The amount of such deposits is essentially all cash at December 31, 2011.

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

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 Walmart.

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.

18. Multiple-Deliverable Revenue Arrangements

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 majority of the Company s multiple-deliverable revenue arrangements ship complete within the same quarter.

Under the guidance of the FASB ASU No. 2009-13, 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.

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 Company allocates arrangement consideration to each deliverable in an arrangement based on its relative selling price. The Company determines selling price using vendor-specific objective evidence (VSOE), if it exists, otherwise third-party evidence (TPE). If neither VSOE nor TPE of selling price exists for a unit of accounting, the Company uses estimated selling price (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.

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

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 the sale consideration to each element of the arrangement. 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.

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.

19. 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 was subject to reduction by a maximum of $1 million in the event that the Company did not deliver certain of the assets sold. As of December 31, 2010, $1.0 million was included in assets held for sale and $1.0 million was included in other current liabilities in the consolidated balance sheets. Upon delivery of those certain assets in the quarter ended June 30, 2011 the $1.0 million in consideration was released.

20. Geographic Information

The following is a summary of revenue for the years ended December 31, 2011, 2010 and 2009, based on physical location of the subsidiary making the sale:

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

	2011		2010		2009	
	Product and service and licensed technology revenue	Research and development contract revenue	Product and service and licensed technology revenue	Research and development contract revenue	Product and service revenue	Research and development contract revenue
United States	$ 23,739,828	$ 3,886,114	$ 15,740,087	$ 3,463,508	$ 4,683,627	$ 7,269,404
Canada	-	-	134,692	134,362	149,146	190,379
Total	$ 23,739,828	$ 3,886,114	$ 15,874,779	$ 3,597,870	$ 4,832,773	$ 7,459,783

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, 2011 and 2010, are as follows:

	2011	2010
United States	$ 11,561,840	$ 13,839,370
Canada	4,599,636	6,133,894
Total	$ 16,161,476	$ 19,973,264

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

	Quarters ended			
	March 31, 2011	June 30, 2011	September 30, 2011	December 31, 2011
Product and service revenue	$ 4,993	$ 2,621	$ 4,313	$ 11,296
Research and development contract revenue	785	1,563	994	544
Licensed technonlogy revenue	163	163	163	28
Net loss	(7,243)	(6,753)	(6,291)	(7,167)
Loss per share:				
Basic and Diluted	(0.55)	(0.41)	(0.28)	(0.32)

	Quarters ended			
	March 31, 2010	June 30, 2010	September 30, 2010	December 31, 2010
Product and service revenue	$ 3,163	$ 2,326	$ 4,795	$ 5,455
Research and development contract revenue	1,208	778	957	655
Licensed technonlogy revenue	-	-	-	136
Net loss	(10,558)	(18,516)	(9,292)	(8,593)
Loss per share:				
Basic and Diluted	(0.81)	(1.41)	(0.71)	(0.65)

Note: Per share information for the prior periods has been retroactively adjusted to reflect the May 19, 2011 one-for-ten reverse stock split of the Company s common stock.

22. 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 other subsequent events requiring recognition or disclosure other than as stated below:

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

On January 24, 2012, the Company entered into a Master and Shareholders' Agreement with Axane, S.A., a subsidiary of Air Liquide, pursuant to which the Company and Axane formed a joint venture company based in France under the name Hypulsion (the "JV"). The principal purpose of the JV will be to develop and sell hydrogen fuel cell systems for the European material handling market. On February 29, 2012, the Company completed the formation of the JV and the Company and the JV entered into a Contribution and License Agreement and a Supply and Engineered Services Agreement.

On March 23, 2012, the Company and Broadridge Corporate Issuer Solutions, Inc., as rights agent, entered into Amendment No. 3 (the Rights Amendment) to the Shareholders Rights Agreement, dated as of June 23, 2009 (as amended, the Rights Agreement). The Rights Amendment provides that, generally, any beneficial ownership of shares of our common stock by affiliates and associates of AWM Investments Company, including but not limited to Special Situations Technology Fund, L.P., Special Situations Technology Fund II, L.P., and Special Situations Private Equity Fund, L.P., (collectively, SSF) will not cause the preferred stock purchase rights to become exercisable under the Rights Agreement, so long as SSF and their affiliates and associates do not at any time beneficially own shares of our common stock equaling or exceeding three percent more than the percentage of the then outstanding shares of common stock beneficially owned by SSF and their affiliates and associates immediately following the closing of our public offering on March 28, 2012.

On March 28, 2012, the Company complete an underwritten public offering of 13,000,000 shares of common stock. The shares were sold at $1.15 per share for gross proceeds of approximately $15.0 million. Net proceeds, after underwriting discounts and commissions and other estimated fees and expenses payable by the Company, were approximately $13.6 million. The Company intends to use the net proceeds of the offering for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, commercial expenditures, acquisitions of new technologies or businesses that are complementary to its current technologies or business focus, and investments. In connection with the offering, the Company has granted the underwriter a 45-day option to purchase up to an additional 1,950,000 shares of common stock to cover over-allotments.

On March 29, 2012, the Company sold 1,950,000 additional shares of common stock, pursuant to the underwriter s exercise of its over-allotment option in connection with the Company s recently announced public offering, resulting in additional net proceeds to the Company of $2,085,525.

PLUG POWER INC. AND SUBSIDIARIES

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

	Balance at Beginning of Period	Additions Charged to Cost and Expenses	Deductions (Describe)		Balance at End of Period
December 31, 2011					
Deducted from liability accounts:					
Product warranty reserve	862,480	1,021,100	672,671	(a)	1,210,909
December 31, 2010					
Deducted from liability accounts:					
Product warranty reserve	-	1,004,822	142,342	(a)	862,480

(a) Cost of warranty performed