

PLUG POWER INC

FORM 10-K (Annual Report)

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF To the fiscal year ended December 31, 2012	THE SECURITIES EXCHANGE ACT OF 1934
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) For the transition period fromto Commission file	OF THE SECURITIES EXCHANGE ACT number: 1-34392
Plug Po	
(Exact Name of Registrant	as Specified in Its Charter)
Delaware (State or Other Jurisdiction of Incorporation or Organization)	22-3672377 (I.R.S. Identification Number)
968 ALBANY SHAKER ROAD. (Address of Principal Executiv (518) 78 (Registrant's telephone nu	re Offices, including Zip Code) 32-7700
Securities registered pursuan	nt to Section 12(b) of the Act:
Title of Each Class Common Stock, par value \$.01 per share Series A Junior Participating Cumulative Preferred Stock, par value \$.01 per share	Name of Each Exchange on Which Registered The NASDAQ Capital Market The NASDAQ Capital Market
Securities registered pursuant to	Section 12(g) of the Act: None
Indicate by check mark if the registrant is a well-known seasoned issuer, as	defined in Rule 405 of the Securities Act. Yes \square No \boxtimes
Indicate by check mark if the registrant is not required to file reports p	oursuant to Section 13 or Section 15(d) of the Act. Yes □ No ⊠

	hs (or for such shorter period that		s 13 or 15(d) of the Securities Exchange Act such reports), and (2) has been subject to
	ed pursuant to Rule 405 of Regu	lation S-T (§ 232.405 of this chapter	e Web site, if any, every Interactive Data c) during the preceding 12 months (or for
	's knowledge, in definitive proxy	nt to Item 405 of Regulation S-K is no y or information statements incorpora	ot contained herein, and will not be ated by reference in Part III of this Form 10-
			accelerated filer, or a smaller reporting smaller reporting company" in Rule 12b-2 of
Large accelerated filer □	Accelerated filer	Non-accelerated filer ⊠	Smaller reporting company □
Indicate by check mark whether	the registrant is a shell company	y (as defined in Rule 12b-2 of the Ex	change Act). Yes □ No ⊠
The aggregate market value of the 2012 was \$25,274,021.	ne voting and non-voting commo	on equity of the registrant held by no	n-affiliates of the registrant on June 30,
As of March 22, 2013, 63,799,06	ŭ	nmon stock were issued and outstand	ing.
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 we do not have enough cash to fund our operations to profitability and if we are unable to secure additional capital, we may need to reduce and/or cease our operations; the risk that a "going concern" opinion from our auditors, KPMG LLP, could impair our ability to finance its operations through the sale of equity, incurring debt, or other financing alternatives; the recent restructuring plan we adopted may adversely impact management's ability to meet financial reporting requirements; 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 risk that our continued failure to comply with NASDAO's listing standards may result in our common stock being delisted from the NASDAO stock market, which may severely limit our ability to raise additional capital; the cost and timing of developing, marketing and selling our products and our ability to raise the necessary capital to fund such costs; the ability to achieve the forecasted gross margin on the sale of our products; the actual net cash used for operating expenses may exceed the projected net cash for operating expenses; the cost and availability of fuel and fueling infrastructures for our products; market acceptance of our GenDrive systems; our ability to establish and maintain relationships with third parties with respect to product development, manufacturing, distribution and servicing and the supply of key product components; the cost and availability of components and parts for our products; our ability to develop commercially viable products; our ability to reduce product and manufacturing costs; our ability to successfully expand our product lines; our ability to improve system reliability for our GenDrive systems; competitive factors, such as price competition and competition from other traditional and alternative energy companies; our ability to protect our intellectual property; the cost of complying with current and future federal, state and international governmental regulations; and other risks and uncertainties discussed under Item 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, or LPG, natural gas, propane, methanol, 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, or OEMs, and their dealer networks. We sell to businesses, government agencies and commercial consumers.

We were organized in the State of Delaware on June 27, 1997. 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., or Cellex, and General Hydrogen Corporation, or 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 products.

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 our GenDrive product line, which represents 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 and expertise in power electronics, controls, and software design.

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, and a scalable design for low power applications, giving customers greater flexibility in managing their deployments. By the third quarter of 2012, the majority of units produced and shipped were based on the simplified architecture. During the fiscal year ended December 31, 2012, we received new orders from Stihl, Mercedes Benz, Lowe's, Carter's and Ace Hardware. We also experienced add-on orders from Walmart, P&G, Coca-Cola, Sysco, Wegmans, Kroger and BMW.

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

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 2012, the majority of our GenDrive product installations were in North America.

We shipped 1,391 units and received 731 orders for our GenDrive product during the year ended December 31, 2012. Of the 1,391 units shipped during 2012, 255 of these were shipped under a Power Purchase Agreement, and will be recorded as revenue as monthly lease payments are received. Backlog on December 31, 2012 was 1,309 units representing approximately \$25.9 million in invoice value. Backlog on December 31, 2011 was 1,969 units representing approximately \$36.0 million in invoice value.

	2012	2011
Product Shipments	1,391	1,024
Cancellations/Adjustments	-	37
Orders	731	2,503
Backlog	1,309	1,969

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 days and twenty-four 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. The Company took no GenCore or GenSys orders in 2012 and did not ship any of these products in 2012.

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, or 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. In addition to overall pricing, the principal competitive factors in the markets in which we operate include 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 being our employee, which are related to or result from work or research that we perform, will remain our sole and exclusive property.

During 2012, the U.S. Patent and Trademark Office, or USPTO, issued two new patents to us and we have a total of 159 issued patents currently active with the USPTO. At the close of 2012, we had approximately 9 U.S. patent applications pending. The number of pending patent applications decreased in 2012 relative to 2011. Additionally, we have six trademarks registered with the USPTO.

On February 29, 2012, we formed a joint venture company based in France with Axane, S.A. under the name Hypulsion S.A.S to develop and sell hydrogen fuel cell systems for the European material handling market. As part of the formation of Hypulsion, we and Hypulsion entered into a License Agreement dated as of February 29, 2012 under which we granted a license to Hypulsion of certain intellectual property. Under the License Agreement, the Company grants to Hypulsion a royalty-free license to certain intellectual property in the field of integrated hydrogen fuel cell systems for the material handling market. The license is exclusive as to the territories of Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Liechtenstein, Luxemburg, Republic of Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom (the "Territory"). If the Company sells its entire equity interest in Hypulsion, the license becomes non-exclusive one year after such sale. Further, the license becomes non-exclusive, and the Company may terminate the license, upon any bankruptcy or dissolution of Hypulsion. Under the License Agreement, the Company receives a royalty-free license back to certain intellectual property of Hypulsion in the field of integrated hydrogen fuel cell systems for the material handling market outside of the Territory.

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, or 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 2013. 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, local or non-U.S. 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, energy storage devices, and other major components from single or limited sources. In 2010, we signed a supply agreement with Ballard Power Systems, or Ballard, which continues through December 31, 2014. Under this agreement, Ballard serves as the exclusive supplier of fuel cell stacks for Plug Power's GenDrive product line for North America and select European countries. An addendum to this agreement was signed on June 30, 2011. We had contractual obligations under this addendum to purchase 3,250 fuel cell stacks between the dates of July 2, 2011 and December 31, 2012.

We believe there are a few component suppliers and manufacturing vendors whose loss to us could have a material adverse effect upon our business and financial condition. Such vendors include Ballard and Air Squared, Inc. 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.

In October of 2012, we were awarded \$2.5 million from the U.S. Department of Energy to retrofit 15 electronic tow tractors with hydrogen fueled fuel cells, to be deployed at two FedEx Express airport hub locations. In addition, we were awarded a grant from the New York State Energy Research and Development Authority in order to develop fuel cell products that could replace diesel generators in refrigerated trucks.

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 \$5.4 million, \$5.7 million and \$12.9 million in 2012, 2011 and 2010, respectively. We also had cost of research and development contract revenue of \$2.8 million, \$6.2 million and \$6.4 million in 2012, 2011 and 2010, 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, 2012, we had 156 employees, including 6 temporary employees. On December 11, 2012, we adopted a restructuring plan to improve organizational efficiency and conserve working capital needed to support the growth of our GenDrive business. In doing so, 22 full-time positions were eliminated at our U.S. facilities. This workforce reduction was substantially completed on December 13, 2012. As a result of the restructuring, we expect to reduce annual expenses by \$3.0 to \$4.0 million.

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.

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 \$121.7 million in 2008, \$40.7 million in 2009, \$47.0 million in 2010, \$27.5 million in 2011 and \$31.9 million for 2012. As of December 31, 2012, we had an accumulated deficit of \$786.6 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, management must successfully execute our planned path to profitability in the early adoption markets on which we are focused, the hydrogen infrastructure that is needed to support our growth readiness and cost efficiency must be available and cost efficient, we must continue to shorten the cycles in our product roadmap with respect to product reliability and performance that our customers expect and successful introduction of our products into the market, we must accurately evaluate our markets for, and react to, competitive threats in both other technologies (such as advanced batteries) and our technology field, and we must continue to lower our products' build costs and lifetime service costs. If we are unable to successfully take these steps, we may never operate profitably, and, even if we do achieve profitability, we may be unable to sustain or increase our profitability in the future.

We do not have enough cash to fund our operations to profitability and if we are unable to secure additional capital, we may be required to seek strategic alternatives, including but not limited to a potential business combination or a sale of our company or our business, or reduce and/or cease our operations.

We have experienced recurring operating losses and as of December 31, 2012, we had an accumulated deficit of approximately \$786.6 million. Substantially all of our accumulated deficit has resulted from costs incurred in connection with our operating expenses, research and development expenses and from general and administrative costs associated with our operations. On December 31, 2012, we had cash and cash equivalents of \$9.4 million and net working capital of \$6.9 million. This compares to \$13.9 million and \$22.5 million, respectively, on December 31, 2011. In addition, based on the borrowing base calculation and our outstanding loan balance, as of December 31, 2012 we had no availability under our loan facility with Silicon Valley Bank, and as of March 29, 2013 this loan facility expired. Given its expiration, we no longer have access to this facility. We expect that for the fiscal year 2013, operating cash burn will be approximately \$10-\$15 million, which exceeds our cash at December 31, 2012. We expect that we will have sufficient cash to continue our operations into May of 2013. In light of our cash position, we may be required to seek strategic alternatives, including but not limited to a potential business combination or a sale of our company or our business.

To date, we have funded our operations primarily through public and private 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. 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 require significant additional capital funding and such capital may not be available to us.

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. We are also exploring various alternatives including debt and equity financing vehicles, strategic partnerships and government programs that may be additional funding sources available to us, and/or a sale of the Company.

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. If we are unable to fund our operations without additional external financing and therefore cannot sustain future operations, we may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection.

Alternatives we would consider for additional funding include additional equity or debt financings, a sale-leaseback of our real estate, or licensing of our technology. In addition to raising capital, we may also consider strategic alternatives including business combinations, strategic alliances or joint ventures. If we are unable to obtain additional capital in 2013, 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. The additional capital from the proceeds of the February, 2013 offering is expected to fund our operations into May of 2013. 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 additional equity or debt financings, strategic alternatives or otherwise, there can be no assurance that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds. If we raise additional funds through collaborations and/or licensing arrangements, we might be required to relinquish significant rights to our technologies, or grant licenses on terms that are not favorable to us.

The report of our independent registered public accounting firm expresses substantial doubt about the Company's ability to continue as a going concern.

Our auditors, KPMG LLP, have indicated in their report on the Company's financial statements for the fiscal year ended December 31, 2012 that conditions exist that raise substantial doubt about our ability to continue as a going concern due to our recurring losses from operations and substantial decline in our working capital. A "going concern" opinion could impair our ability to finance our operations through the sale of equity, incurring debt, or other financing alternatives. Our ability to continue as a going concern will depend upon the availability and terms of future funding, continued growth in product orders and shipments, improved operating margins and our ability to profitably meet our after-sale service commitments with existing customers. If we are unable to achieve these goals, our business would be jeopardized and the Company may not be able to continue. If we ceased operations, it is likely that all of our investors would lose their investment.

The recent restructuring plan we adopted may adversely impact management's ability to meet financial reporting requirements.

On December 11, 2012, we adopted a restructuring plan to improve organizational efficiency and conserve working capital needed to support the growth of our GenDrive business. In doing so, 22 full-time positions were eliminated at our U.S. facilities, including positions in our finance department. This workforce reduction was substantially completed on December 13, 2012. As a result of the restructuring and associated reduced headcount, going forward we may lack the resources to adequately meet our financial reporting requirements.

We may have rescission liability in connection with the articles published in the Business Review on January 11, 2013 and January 16, 2013.

The statements made by our Chief Executive Officer in the articles appearing in the Business Review were published within close proximity to the time that our registration statement on Form S-1 was filed on January 15, 2013. It may be determined that such statements constituted an offer to purchase our securities in violation of Section 5 of the Securities Act of 1933, or the Securities Act. As a result, we may be subject to contingent rescission liabilities from those investors who purchase shares and subsequently make a claim under Sect 12(a)(1) of the Securities Act alleging that we violated Section 5. If an investor was to successfully win such a claim, we may have an obligation to make a rescission offer to those investors. Although we believe the chances are remote, if rescission is required, we may continue to be liable for the original purchase price, plus interest, for a period of one year under Section 13 of the Securities Act. If all investors rescinded their securities, potential liability could amount to over \$3.3 million plus one year's interest. In additional investors that successfully make such a claim under Section 12(a)(1) of the Securities Act after already having disposed of the securities may be entitled to damages and interest. We are not able to quantify or project what such damages would be, but acknowledge that in certain situations, the damages could potentially be greater than the value of the purchase price of the securities.

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 days and twenty-four months from the date of acceptance of the order. Orders received during the year ended December 31, 2012 were 731 units for approximately \$18.6 million in value. Backlog on December 31, 2012 was \$25.9 million, with approximately \$10.7 million of this backlog 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 coul

Certain GenDrive component quality issues have resulted in adjustments to our warranty reserves, which negatively impacted our results and delayed our new order momentum, and unanticipated future product reliability and quality issues could impair our ability to service long term warranty and maintenance contracts profitably.

Isolated quality issues have arisen with respect to certain components in our next-generation GenDrive units that are currently being used at customer sites. The product and service revenue contracts we entered into generally provide a one-to-two-year product warranty to customers from date of installation. We have had to retrofit the units subject to component quality issues with replacement components that will improve the reliability of our next-generation GenDrive products for those customers. We have estimated the costs of satisfying those warranty claims and recorded a net reserve adjustment of \$2.9 million during the year ended December 31, 2012. As of December 31, 2012, there was approximately \$2.0 million of this reserve included in product warranty reserve in the consolidated balance sheets. However, if any unanticipated additional quality issues or warranty claims arise, additional material charges may be incurred in the future. We continue to work with our vendors on these component issues to recover charges taken and improve quality and reliability of components to prevent a reoccurrence of the isolated quality issues we have experienced. However, any liability for damages resulting from malfunctions or design defects could be substantial and could materially adversely affect our business, financial condition, results of operations and prospects. In addition, a well-publicized actual or perceived problem could adversely affect the market's perception of our products resulting in a decline in demand for our products and could divert the attention of our management, which may materially and adversely affect our business, financial condition, results of operations and prospects.

Our GenDrive 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, 2012, four of our customers comprised approximately 82.2% of the total accounts receivable balance, with each customer individually representing 63.1%, 7.7%, 6.3%, and 5.1% of that amount. For the year ended December 31, 2012, contracts with two customers comprise approximately 43.1% of total consolidated revenues, with each customer individually representing 27.7%, and 15.4%, 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: a slowdown or delay in a customer's deployment of our products could significantly reduce demand for our products; reductions in a single customer's forecasts and demand could result in excess inventories; 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; consolidation of customers can reduce demand as well as increase pricing pressure on our products due to increased purchasing leverage; 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 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.

One of our stockholders, Interinvest Corporation Inc or Interinvest, and its affiliates and associates 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 February 22, 2013, Interinvest owned approximately 15.62% of the outstanding shares of our common stock. As a result, Interinvest can significantly influence or control certain matters requiring approval by our stockholders, including the approval of mergers or other extraordinary transactions. The interests of Interinvest may differ from our interests and the interests of our other stockholders, and Interinvest may vote in a way that may be adverse to our interests and the interests of our 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 stockholders who beneficially own significant shares of our common stock such that they may influence or have control over certain Company matters. However, such stockholders have not yet filed reports to disclose their ownership of us and we cannot confirm the exact ownership of those stockholders at this time.

The sale by Interinvest or other significant stockholders of a substantial number of shares of our 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.

Interinvest and its affiliates and associates beneficially held 8,905,367 shares of common stock as of February 22, 2013, which represented in the aggregate approximately 15.62% of our outstanding common stock. If Interinvest, other significant stockholders or their affiliates sell substantial amounts of our common stock in the public market, the market price of our common stock could decrease significantly.

If our stock price continues to remain below \$1.00, our common stock may be subject to delisting from The NASDAO Stock Market.

On October 12, 2012, we received a deficiency notice from NASDAQ stating that we no longer comply with NASDAQ Marketplace Rule 5550 (a)(2) because the bid price of our common stock closed below the required minimum \$1.00 per share for the previous 30 consecutive business days. The notice also indicated that, in accordance with Marketplace Rule 5810(c)(3)(A), we have a period of 180 calendar days, until April 10, 2013, to regain compliance with Rule 5550(a)(2). If at any time before April 10, 2013 the bid price of our common stock closes at \$1.00 per share or more for a minimum of 10 consecutive business days, NASDAQ will notify us that we have regained compliance with Rule 5550(a)(2). In the event we do not regain compliance with Rule 5550(a)(2) prior to the expiration of the 180-day period, NASDAQ will notify us that our common stock is subject to delisting. We may appeal the delisting determination to a NASDAQ hearing panel and the delisting will be stayed pending until the panel's determination. At such hearing, we would present a plan to regain compliance and NASDAQ would then subsequently render a decision. We are currently evaluating our alternatives to resolve the listing deficiency. To the extent that we are unable to resolve the listing deficiency, there is a risk that our common stock may be delisted from NASDAQ, which would adversely impact liquidity of our common stock and potentially result in even lower bid prices for our common stock.

Our stock price has been and could remain volatile, which could further adversely affect the market 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 2012, the sales price of our common stock fluctuated from a high of \$2.60 per share in the first quarter of 2012 to a low of \$0.47 per share in the fourth quarter of 2012. 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. For example, in the fourth quarter of 2012, Ballard had temporarily stopped shipping fuel cell stacks for our GenDrive product line due to a dispute with us, but we have since resolved this dispute and we are once again in good standing with Ballard as our supplier. 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.

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: the cost competitiveness of our products; the future costs of natural gas, hydrogen and other fuels expected to be used by our products; consumer reluctance to try a new product; consumer perceptions of our products' safety; regulatory requirements; barriers to entry created by existing energy providers; and 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 GenSys product line, 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.

We currently are, and may from time to time become, a named party in contract disputes for which an adverse outcome could result in us incurring significant expenses, being liable for damages and subject to indemnification claims.

From time to time, we may be subject to contract disputes or litigation. In connection with any disputes or litigation in which we are involved, we may be forced to incur costs and expenses in connection with defending ourselves or in connection with the payment of any settlement or judgment or compliance with any injunctions in connection therewith if there is an unfavorable outcome. The expense of defending litigation may be significant. The amount of time to resolve lawsuits is unpredictable and defending ourselves may divert management's attention from the day-to-day operations of our business, which could adversely affect our business, results of operations, financial condition and cash flows. In addition, an unfavorable outcome in any such litigation could have a material adverse effect on our business, results of operations, financial condition and cash flows.

For example, in July 2008, Soroof Trading Development Company Ltd., or Soroof, filed a demand for arbitration against GE Fuel Cell Systems, LLC, or GEFCS, claiming breach of a distributor agreement and seeking damages of \$3 million. Prior to GEFCS' dissolution in 2006, we held a 40% membership interest and GE Microgen, Inc., or GEM, held a 60% membership interest in GEFCS. In January 2010, Soroof requested, and GEM and we 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. On January 24, 2012, following a motion for judgment on the pleadings and motion for summary judgment, the Court dismissed with prejudice four of Soroof's claims and dismissed without prejudice two of Soroof's claims. The Court also dismissed with prejudice all claims against GEFCS. Soroof filed an amended complaint on May 14, 2012 against us, GEM, and General Electric Company, re-pleading the two claims that were dismissed without prejudice. On December 12, 2012, the parties participated in a court settlement conference with the presiding judge at the United States District Court for the Southern District of New York. The case was not resolved at the settlement conference and discovery continues. Accordingly, we believe that it is too early to determine whether there is likely exposure to an adverse outcome and whether or not the probability of an adverse outcome is more than remote. We, GEFCS, GEM and General Electric Company, or GE, are party to an agreement under which we 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 us under this agreement for all losses it may suffer as a result of the Soroof dispute. To the extent that the dispute results in an adverse outcome for us or for any of the parties we have agreed to indemnify, we could suffer financially as a result of the damages we would have to pay on behalf of ourself or our indemnitees. In addition, on January 29, 2013, Chardan Capital Markets LLC, or Chardan, by its counsel, sent a letter to us claiming that we had entered into and violated an exclusivity agreement with Chardan in April 2012 in connection with the potential financing of certain power purchase agreements, whereby the Company would be required to pay Chardan an agency fee in the event a defined transaction was consummated. Chardan claims that it introduced us to Sandton Capital Markets, or Sandton, a potential financier, and that we failed to engage in good faith negotiations with Sandton. Chardan alleges that we entered into a financing arrangement with a third party in violation of the exclusivity provision. Chardan claims damages in excess of \$1,250,000. On February 7, 2013, Chardan sent a letter to us attaching a draft complaint alleging claims of (1) breach of contract and (2) quantum meruit. Chardan has stated its intention to file the complaint, but we have not been served with the complaint nor has Chardan stated that it has, in fact, filed the complaint. We believe that Chardan's claims are without merit and on February 7, 2013, our counsel sent a letter to Chardan denying any wrongdoing or liability on our part in connection with Chardan's claims. We intend to vigorously defend this matter and assert any applicable counterclaims. To the extent, however, that the dispute results in an adverse outcome for us, we could suffer financially as a result of the damages we would have to pay.

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.

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.

The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on the NASDAQ Capital Market.

Market conditions may result in volatility in the level of, and fluctuations in, the market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. The overall weakness in the economy has recently contributed to the extreme volatility of the markets which may have an effect on the market price of our common stock.

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

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

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. W

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 2012 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., or Soroof, filed a demand for arbitration against GE Fuel Cell Systems, LLC, or GEFCS, claiming breach of a distributor agreement and seeking damages of \$3 million. Prior to GEFCS' dissolution in 2006, we held a 40% membership interest and GE Microgen, Inc., or 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. On January 24, 2012, following a motion for judgment on the pleadings and motion for summary judgment, the Court dismissed with prejudice four of Soroof's claims and dismissed without prejudice two of Soroof's claims. The Court also dismissed with prejudice all claims against GEFCS. Soroof filed an amended complaint on May 14, 2012 against us, GEM, and General Electric Company, re-pleading the two claims that were dismissed without prejudice. On December 12, 2012, the parties participated in a court settlement conference with the presiding judge at the United States District Court for the Southern District of New York. The case was not resolved at the settlement conference and discovery continues. Accordingly, we believe that it is too early to determine whether there is likely exposure to an adverse outcome and whether or not the probability of an adverse outcome is more than remote. We, GEFCS, GEM and General Electric Company, or GE, are party to an agreement under which we 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 us under this agreement for all losses it may suffer as a result of the Soroof dispute. To the extent that the dispute results in an adverse outcome for us or for any of the parties for which we have agreed to indemnify, we could suffer financially as a result of the damages we would have to pay on our behalf or that of our indemnitees.

On January 29, 2013, Chardan Capital Markets LLC, or Chardan, by its counsel, sent a letter to us claiming that we had entered into and violated an exclusivity agreement with Chardan in April 2012 in connection with the potential financing of certain power purchase agreements, whereby we would be required to pay Chardan an agency fee in the event a defined transaction was consummated. Chardan claims that it introduced us to Sandton Capital Markets, or Sandton, a potential financier, and that we failed to engage in good faith negotiations with Sandton. Chardan alleges that we entered into a financing arrangement with a third party in violation of the exclusivity provision. Chardan claims damages in excess of \$1,250,000. On February 7, 2013, Chardan sent a letter to us attaching a draft complaint alleging claims of (1) breach of contract and (2) quantum meruit. Chardan has stated its intention to file the complaint, but we have not been served with the complaint nor has Chardan stated that it has, in fact, filed the complaint. We believe Chardan's claims are without merit. On February 7, 2013, our counsel sent a letter to Chardan denying any wrongdoing or liability on our part in connection with Chardan's claims. We intend torigorously defend this matter and assert any applicable counterclaims.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

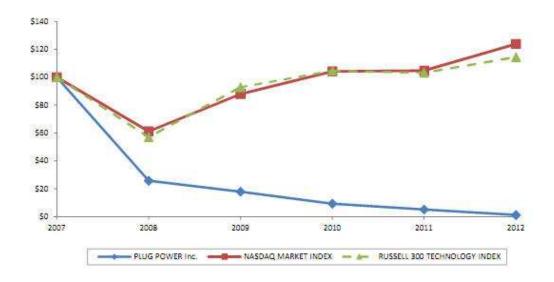
During the years ended December 31, 2012 and 2011, we issued 403,579 and 133,748 shares, respectively, of our common stock in connection with matching contributions under our 401(k) Savings & Retirement Plan. The issuance of these shares is exempt from registration under Section 3(a) (2) of the Securities Act of 1933, as amended.

Market Information. Our common stock is traded on the NASDAQ Capital Market under the symbol "PLUG." As of March 19, 2013, there were approximately 682 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 38,000. 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					
	Hig	gh	L	ow			
2012							
1st Quarter	\$	2.60	\$	1.26			
2nd Quarter	\$	1.41	\$	1.10			
3rd Quarter	\$	1.30	\$	0.76			
4th Quarter	\$	0.92	\$	0.47			
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			

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 3000 Technology Index for the period commencing December 31, 2007 and ending December 31, 2012. The calculation of the cumulative total return assumes a \$100 investment in the Company's common stock, the NASDAQ Market Index and the Russell 3000 Technology Index on December 31, 2007 and the reinvestment of all dividends.



Index	2007	2008	2009	2010	2011	2012
PLUG POWER INC.	100.00	25.82	17.97	9.37	5.16	1.27
RUSSELL 3000 TECHNOLOGY INDEX	100.00	57.07	92.79	104.59	103.23	114.42
NASDAQ MARKET INDEX	100.00	61.17	87.93	104.13	104.69	123.85

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 2012, 2011, 2010, 2009, and 2008 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,									
	2012		2011		2010		2009			2008
Statements Of Operations:				(in thousan		nds, except per		re data)		
Product and service revenue	\$	24,407	\$	23,223	\$	15,739	\$	4,833	\$	4,667
Research and development contract revenue		1,701		3,886		3,598		7,460		13,234
Licensed technology revenue				517		136				-
Total revenue		26,108		27,626		19,473		12,293		17,901
Cost of product and service revenues		37,658		30,670		23,111		7,246		11,442
Cost of research and development contract revenues		2,805		6,232		6,371		12,433		21,505
Research and development expense		5,434		5,656		12,901		16,324		34,987
Selling, general and administrative expenses		14,577		14,546		25,572		15,427		28,333
Goodwill impairment charge		-		-		-		-		45,843
Gain on sale of assets		-		(673)		(3,217)		-		-
Amortization of intangible assets		2,306		2,322		2,264		2,132		2,225
Other income (expense), net		4,810		3,673		570		560		4,734
Net loss	\$	(31,862)	\$	(27,454)	\$	(46,959)	\$	(40,709)	\$	(121,700)
	_									
Loss per share, basic and diluted	\$	(0.93)	\$	(1.46)	\$	(3.58)	\$	(3.15)	\$	(13.62)
Weighted average number of common shares outstanding	_	34,376		18,778	_	13,123	_	12,911	_	8,938
Balance Sheet Data:										
(at end of the period)										
Unrestricted cash, cash equivalents and available-for-sale securities	\$	9,380	\$	13,857	\$	21,359	\$	62,541	\$	104,688
Trading securities – auction rate debt securities		-		-		-		53,397		52,651
Total assets		39,460		55,656		59,177		164,185		209,112
Borrowings under line of credit		3,381		5,405		-		59,375		62,875
Current portion of long-term obligations		650		-		-		533		401
Long-term obligations		7,390		9,577		3,141		2,426		1,313
Stockholders' equity		15,030		29,036		42,913		88,269		125,864
Working capital		6,901		22,452		25,556		60,009		86,171

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

We are 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. By the third quarter of 2012, the majority of units produced and shipped were based on the simplified architecture. During the fiscal year ended December 31, 2012, we received new orders from Stihl, Mercedes Benz, Lowe's, Carter's and Ace Hardware. We also experienced add-on orders from Walmart, P&G, Coca-Cola, Sysco, Wegmans, Kroger and BMW.

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. We adopted a restructuring plan on December 11, 2012, aimed at improving organizational efficiency and to conserve working capital needed to support the growth of our GenDrive business. As a result of the recent restructuring, we expect to reduce annual expenses by \$3.0 to \$4.0 million.

We have experienced recurring operating losses and as of December 31, 2012, we had an accumulated deficit of approximately \$786.6 million. Substantially all of our accumulated deficit has resulted from costs incurred in connection with our operating expenses, research and development expenses and from general and administrative costs associated with our operations. We expect that for fiscal year 2013, operating cash burn will be approximately \$10-\$15 million.

Net cash used in operating activities for the year ended December 31, 2012 was \$20.2 million. Additionally, on December 31, 2012, we had cash and cash equivalents of \$9.4 million and net working capital of \$6.9 million. This compares to \$13.9 million and \$22.5 million, respectively, at December 31, 2011.

We are party to a Loan and Security Agreement with Silicon Valley Bank, or SVB, dated as of August 9, 2011 and modified most recently on November 29, 2012, which expired as of March 29, 2013. The SVB loan facility provided us with access of up to \$15 million of availability, subject to borrowing base limitations, to support working capital needs. Given its expiration, we no longer have access to this facility. As of December 31, 2012, \$3.4 million was outstanding under the loan agreement. This amount was subsequently paid in full in January, 2013. The Company maintains all of its operating bank accounts with SVB and will continue to assess opportunities to reestablish a credit facility with SVB.

We believe that our current cash, cash equivalents and cash generated from future sales, provide sufficient liquidity to fund our operations into May 2013. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions. To date, we have funded our operations primarily through public and private 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 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. If we are unable to fund our operations without additional external financing and therefore cannot sustain future operations, we may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection.

The Company believes it has potential financing resources in order to raise the capital necessary to fund operations through fiscal year end 2013. The Company's current sources of capital include the raising of \$2.4 in public equity offering completed in February, 2013, and the completion of a sale leaseback of its real estate in Latham, NY on March 27, 2013 as more fully described in Note 21, Subsequent Events.

Alternatives we would consider for additional funding include equity or debt financing, a sale-leaseback of our real estate, or licensing of our technology. In addition to raising capital, we may also consider strategic alternatives including business combinations, strategic alliances or joint ventures. Under such conditions, if we are unable to obtain additional capital in 2013, 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. The additional capital from the proceeds of the February, 2013 offering is expected to fund our operations into May of 2013. 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 additional equity or debt financing, strategic alternatives or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds 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.

Recent Developments

Power Purchase Agreement

On October 1, 2012, we entered into a Power Purchase Agreement (PPA) under which it is providing a customer with 255 GenDrive units, service and maintenance of the units and daily delivery of hydrogen in exchange for a monthly utility payment tied to the amount of energy (kilograms of hydrogen) consumed each month. The PPA has an initial term of three years with an automatic three year renewal unless the customer terminates at the end of the initial 3 year term.

On December 28, 2012, Plug Power sold the 255 GenDrive units in use under the PPA to a third party and leased back the equipment for a period of 6 years to use to fulfill its obligations under the PPA or at other customer sites as agreed to by the owner/lessor. The transaction has been recorded by the Company as leased property under capital lease with a corresponding liability of obligations under capital lease on the consolidated balance sheets. As of December 31, 2012, assets relating to this agreement were \$2,970,000, recorded as leased property under capital lease, and liabilities relating to this agreement were \$1,955,000, recorded as obligations under capital leases on the consolidated balance sheets.

Under the terms of the sale leaseback arrangement, the owner/lessor receives full rights of ownership and title to the GenDrive equipment including all tax credits and tax basis rights in the equipment. Under the terms of the lease, the Company has received the rights to rent and use the equipment for the full term of the lease provided there is no uncured event of default under the lease. The lease is non-cancellable with no stated or bargain purchase option at the end of the lease term.

NASDAQ Notice

On October 12, 2012, we received a deficiency notice from The NASDAQ Stock Market, or the NASDAQ, stating that we no longer comply with NASDAQ Marketplace Rule 5550(a)(2) because the bid price of our common stock closed below the required minimum \$1.00 per share for the previous 30 consecutive business days. The notice also indicated that, in accordance with Marketplace Rule 5810(c)(3)(A), we have a period of 180 calendar days, until April 10, 2013, to regain compliance with Rule 5550(a)(2). If at any time before April 10, 2013 the bid price of our common stock closes at \$1.00 per share or more for a minimum of 10 consecutive business days, NASDAQ will notify us that we have regained compliance with Rule 5550(a)(2). In the event we do not regain compliance with Rule 5550(a)(2) prior to the expiration of the 180-day period, NASDAQ will notify us that our common stock is subject to delisting. We may appeal the delisting determination to a NASDAQ hearing panel and the delisting will be stayed pending until the panel's determination. At such hearing, we would present a plan to regain compliance and NASDAQ would then subsequently render a decision. We are currently evaluating our alternatives to resolve the listing deficiency.

Loan and Security Agreement

On November 29, 2012 we executed a Third Loan Modification Agreement with SVB, which, among other things, waived our failure to comply with the Adjusted Quick Ratio financial covenant as of the months ended September 30, 2012 and October 31, 2012, revised the future Adjusted Quick Ratio covenant level and removed our ability to request financing for Inventory Placeholder Invoices. On March 29, 2013, the Company's revolving credit facility and loan agreement with Silicon Valley Bank (SVB) expired and was not renewed. The Company maintains all of its operating bank accounts with SVB and will continue to assess opportunities to reestablish a credit facility with SVB.

Restructuring

On December 11, 2012, we adopted a restructuring plan to improve organizational efficiency and conserve working capital needed to support the growth of our GenDrive business. In doing so, 22 full-time positions were eliminated at our U.S. facilities. This workforce reduction was substantially completed on December 13, 2012. As a result of the overall restructuring, we expect to reduce annual expenses by \$3.0 to \$4.0 million.

Purchase and Sale Agreement and Lease Agreement

On January 24, 2013, we entered into a Purchase and Sale Agreement with 968 Albany Shaker Road Associates, LLC (the Buyer). The Purchase and Sale Agreement provides, among other things, that the Company will sell to the Buyer its property (building and land) located at 968 Albany Shaker Road, Latham, New York consisting of approximately 34.45 acres for an aggregate purchase price of \$4,500,000 and that the Company and the Buyer will form a new limited liability company. The new limited liability company will provide the Company with monthly distributions.

In connection with the Purchase and Sale Agreement, we also entered into a Lease Agreement on January 24, 2013 with the Buyer, pursuant to which the Company leases from the Buyer a portion of the premises sold pursuant to the Purchase and Sale Agreement for a term of 15 years.

On March 13, 2013, we entered into an Amendment to Purchase and Sale Agreement (the "Amendment") with the Buyer. Among other things, the Amendment decreases the amount payable to the Company at the closing of the Purchase and Sale Agreement, increases the value of the Company's membership interest in the new limited liability company, and increases the monthly distributions to be paid by the new limited liability company to the Company.

On March 27, 2013, the Company completed the sale and leaseback transaction of its property under the terms described above. Additionally, at the closing the Company issued two standby letters of credit to the benefit of the landlord/lessor that can be drawn by the beneficiary in the event of default on the lease by Plug Power. The standby letters total \$750,000 and are 100% collateralized by cash balances of the Company. This cash is restricted from use by the Company for any other purpose than to collateralize the standby letters. The standby letters are renewable for a period of ten years and can be cancelled in part or in full if certain covenants are met and maintained by the Company.

Shareholder Rights Agreement.

On February 12, 2013, we amended our Shareholder Rights Agreement dated as of June 23, 2009, as amended, to exempt any investor from purchasing shares of common stock and accompanying warrants in our public offering on February 13, 2013 of common stock and warrants to purchase shares of common stock, so long as such investor and its affiliates and associates do not at any time beneficially own shares of our common stock equaling or exceeding one-half of one percent more than the percentage of the then outstanding shares of common stock beneficially owned by such investor and its affiliates and associates immediately following the closing of the February 2013 offering. As a result, such ownership by any such investor will not trigger the exercisability of the preferred share purchase rights under the Shareholder Rights Agreement that would give each holder the right to receive upon exercise one ten-thousandth of a share of our Series A Junior Participating Cumulative Preferred Stock.

Public Offering.

On February 20, 2013, we completed an underwritten public offering of 18,910,000 shares of common stock and accompanying warrants to purchase 18,910,000 shares of common stock. The shares and warrants were sold together as a fixed combination, with each combination consisting of one share of common stock and one warrant to purchase one share of common stock, at a price to the public of \$0.15 per fixed combination for gross proceeds of approximately \$2.8 million. The warrants have an exercise price of \$0.15 per share, are immediately exercisable and will expire on February 20, 2018. Net proceeds, after underwriting discounts and commissions and other estimated fees and expenses payable by the Company, were approximately \$2.1 million. The Company intends to use the net proceeds of the offering for working capital and other general corporate purposes, including capital expenditures. In connection with the offering, the Company has granted the underwriters a 45-day option to purchase up to an additional 2,836,500 shares of common stock to cover over-allotments, if any.

On February 21, 2013, the Company sold 2,801,800 additional shares of common stock, pursuant to the underwriter's exercise of its overallotment option in connection with the Company's recently announced public offering, resulting in additional net proceeds to the Company of approximately \$365,000.

On May 31, 2011, the Company granted 7,128,563 warrants as part of an underwritten public offering. As a result of the March 28 and 29, 2012 public offerings and pursuant to the effect of the anti-dilution provisions, the exercise price of the warrants was reduced to \$2.27 per share of common stock. Simultaneously with the adjustment to the exercise price, the number of common stock shares that may be purchased upon exercise of the warrants was increased to 9,421,008 shares. As a result of the February 20 and 21, 2013 public offerings and pursuant to the effect of the anti-dilution provisions, the exercise price of the warrants was reduced to \$1.13 per share of common stock. Simultaneously with the adjustment to the exercise price, the number of common stock shares that may be purchased upon exercise of the warrants was increased to 18,925,389 shares.

Results of Operations

Product and service revenue. Product and service revenue relates to revenue recognized from multiple deliverable revenue arrangements. Effective April 1, 2010, the Company adopted ASU No. 2009-13 on Topic 605, Revenue Recognition—Multiple Deliverable Revenue Arrangements retroactive to January 1, 2010. 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 3, 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, 2012 increased \$1.2 million or 5.1%, to \$24.4 million from \$23.2 million for the year ended December 31, 2011. This increase is primarily related to increased shipments during the current year. In the product and service revenue category, there were 1,136 fuel cell systems shipped for the year ended December 31, 2012 as compared to 984 fuel cell systems shipped for the year ended December 31, 2011.

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.

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, 2012 decreased \$2.2 million, or 56.2%, to \$1.7 million from \$3.9 million for the year ended December 31, 2011. The decrease is primarily related to fewer active contracts during 2012.

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.

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, 2012 increased \$7.0 million, or 22.8%, to \$37.7 million from \$30.7 million for the year ended December 31, 2011. The increase in the cost of product and service revenue primarily resulted from \$2.9 million in additional expenses for unanticipated warranty claims arising from GenDrive component quality issues that were identified during the year ended December 31, 2012 combined with the increase in the number of units shipped in 2012 compared to 2011. During the year ended December 31, 2012, in the cost of product and service revenue category, we shipped 1,136 fuel cell systems to end customers as compared to 984 fuel cell systems shipped during the year ended December, 2011.

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 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, 2012 decreased \$3.4 million, or 55.0% to \$2.8 million from \$6.2 million for the year ended December 31, 2011. This decrease is due to fewer active contracts during 2012.

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.

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, 2012 decreased \$0.3 million, or 3.9%, to \$5.4 million from \$5.7 million for the year ended December 31, 2011. This decrease was primarily related to a decline in personnel related expenses, partially offset by a decline in our government funded programs, which reduced the research and development expenses that can be allocated to cost of research and development contract revenue in the current year.

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.

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, 2012 increased \$0.1 million, or 0.2%, to \$14.6 million from \$14.5 million for the year ended December 31, 2011. This increase was primarily related to a decline in our government funded programs, which reduced the selling, general and administrative expenses that can be allocated to cost of research and development contract revenue in the current year, partially offset by lower professional fees.

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.

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, 2012, December 31, 2011 and December 31, 2010.

Interest and other income. Interest and other income and net realized losses 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 \$226,000 for the year ended December 31, 2012 from \$248,000 for the year ended December 31, 2011. This decrease is primarily related to lower rental income, partially offset by a realized loss from available-for-sale securities recorded in the first quarter of 2011.

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.

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 during the year ended December 31, 2010 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 that is recorded as a gain in the consolidated statements of operations for the years ended December 31, 2010.

Change in fair value of common stock warrant liability. 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. Derivative warrant liabilities are valued using the Black-Scholes pricing model at the date of initial issuance and each subsequent balance sheet date. Changes in the fair value of the warrants are reflected in the condensed consolidated statement of operations as change in the fair value of common stock warrant liability.

The change in fair value of common stock warrant liability for the year ended December 31, 2012 was \$4.8 million. This compares to a change of \$3.4 million for the year ended December 31, 2012. The increase in the change in fair value of \$1.4 million, or 40.6%, is primarily due to changes in the Company's common stock share price, and changes in volatility of our common stock, which are significant inputs to the Black-Scholes valuation model.

Interest and other expense. Interest and other expense consists of interest related to the Silicon Valley Bank (SVB) Loan and Security Agreement, loan modification fees related to the SVB Credit Line Agreement, interest expense on a previous Credit Line Agreement with a third-party lender, and foreign currency exchange gain (loss).

Interest and other expense for the year ended December 31, 2012 was approximately \$262,000, compared to approximately \$22,000 for the year ended December 31, 2011. Interest and other expense related to the SVB Loan and Security Agreement and the SVB Credit Line Agreement was approximately \$256,000 and \$12,000, respectively, for the year ended December 31, 2012 and December 31, 2011.

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 a previous Credit Line Agreement with a third-party lender, effective July 1, 2010.

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.

Liquidity and Capital Resources

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. If we are unable to fund our operations without additional external financing and therefore cannot sustain future operations, we may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection.

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. We adopted a restructuring plan on December 11, 2012, aimed at improving organizational efficiency and conserving working capital needed to support the growth of our GenDrive business. As a result of the 2012 overall restructuring, we expect that annual expenses will be reduced by \$3.0 to \$4.0 million.

The Company incurred net losses of \$31.9 million, \$27.5 million and \$47.0 million for the years ended December 31, 2012, 2011 and 2010, respectively, and has an accumulated deficit of \$786.6 million at December 31, 2012. Substantially all of our accumulated deficit has resulted from costs incurred in connection with our research and development expenses from general and administrative costs associated with our operations. We expect that for fiscal year 2013, our operating cash burn will be approximately \$10-\$15 million.

Net cash used in operating activities for the year ended December 31, 2012 was \$20.2 million. Additionally, on December 31, 2012, we had cash and cash equivalents \$9.4 million and net working capital of \$6.9 million. This compares to \$13.9 million and \$22.5 million, respectively, at December 31, 2011.

We are party to a Loan and Security Agreement with Silicon Valley Bank, or SVB, which expired as of March 29, 2013. The SVB loan facility provided up to \$15 million of availability, subject to borrowing base limitations, to support working capital needs. Given its expiration, we no longer have access to this facility. As of December 31, 2012, \$3.4 million was outstanding under the loan agreement. This amount was subsequently paid in full in January, 2013. The Company maintains all of its operating bank accounts with SVB and will continue to assess opportunities to reestablish a credit facility with SVB.

To date, we have funded our operations primarily through public and private offerings of common and preferred stock, our line of credit and maturities and sales of our available-for-sale securities. The Company believes it has potential financing sources in order to raise the capital necessary to fund operations through fiscal year end 2013. The Company's current sources of capital include the raising of \$2.4 million in a public equity offering completed in February, 2013, and the completion of a sale leaseback of its real estate in Latham, NY on March 27, 2012 as more fully described in Note 21, Subsequent Events of the consolidated financial statements. We believe that our current cash, cash equivalents and cash generated from future sales will provide sufficient liquidity to fund our operations into May 2013. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions.

In addition to the aforementioned current sources of capital that will provide additional short term liquidity, the Company is currently exploring various other alternatives including debt and equity financing vehicles, strategic partnerships, government programs that may be available to the Company, a sale of the Company, as well as trying to generate additional sales and increase margins. However, at this time the Company has no commitments to obtain any additional funds, and there can be no assurance such funds will be available on acceptable terms or at all. If the Company is unable to obtain additional funding and improve its operations, the Company's financial condition and results of operations may be materially adversely affected and the Company may not be able to continue operations.

Additionally, even if we raise sufficient capital through additional equity or debt financing, strategic alternatives or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds 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.

The consolidated financial statements for the year ended December 31, 2012 were prepared on the basis of a going concern which contemplates that the Company will be able to realize assets and discharge liabilities in the normal course of business. Accordingly, they do not give effect to adjustments that would be necessary should the Company be required to liquidate its assets. The ability of the Company to meet its total liabilities of \$24.4 million at December 31, 2012, and to continue as a going concern is dependent upon the availability of future funding, continued growth in orders and shipments, and the Company's ability to profitably meet its after-sale service commitments with its existing customers. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

During the year ended December 31, 2012, cash used for operating activities was \$20.2 million, consisting primarily of a net loss of \$31.9 million offset, in part, by net non-cash expenses in the amount of \$1.7 million, including \$4.4 million for amortization and depreciation, \$2.0 million for stock based compensation, \$52,000 for loss on disposal of property, plant and equipment, and a \$4.8 million reduction for the change in fair value of common stock warrant liability. Cash used by investing activities for the year ended December 31, 2012 was \$14,000, consisting of \$78,000 used to purchase property, plant and equipment, offset by \$64,000 in proceeds from the disposal of property, plant, and equipment. Cash provided by financing activities for the year ended December 31, 2012 was approximately \$15.7 million consisting primarily of \$17.2 million in proceeds from the public offering offset by \$1.4 million in public offering costs, \$2.0 million net usage for borrowings under line of credit, and \$1.9 million in proceeds from long term debt.

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

	2012		2011			2010	
Cash and cash equivalents at end of period	\$	9,380	\$	13,857	\$	10,955	
Cash and Cash equivalents at end of period	Ψ	9,360	Ψ	13,657	Ψ	10,933	
Trading securities - auction rate debt securities at end of period		-		-		-	
Available-for-sale securities at end of period		-		-	10,403		
Borrowings under line of credit at end of period		3,381		5,405		-	
Working capital at end of period		6,901		22,452		25,556	
Net Loss		31,862		27,454		46,959	
Net cash used in operating activities		20,165		33,310		40,770	
Purchase of property, plant and equipment		78		1,326		1,100	

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 2012 and 2011 that resulted in all of the Company's federal and state net operating loss carryforwards being subject to IRC Section 382 limitations and as a result of IRC Section 382 limitations, all but approximately \$8.8 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, 2012.

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 \$40.0 million. This translates into unfavorable book to tax add backs in the Company's 2013 to 2017 U.S. corporate income tax returns that resulted in a gross deferred tax liability of \$15.2 million at December 31, 2012 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, 2012, under agreements with non-cancelable terms are as follows:

		Total		<1 year		1-3 Years		3-5 Years		> 5 Years
Capital lease obligation (A)	\$	1,955,128	\$	650,379	\$	1,304,749	\$	-	\$	-
Operating lease obligations (B)		3,432,887		658,470		916,387		898,575		959,455
Purchase obligations (C)(D)		3,805,419		1,358,139		570,240		570,240		1,306,800
Other long-term obligations (E),(F)		12,650		12,650		-		-		-
Line of credit (G)		3,380,835		3,380,835		-		-		-
	'	_		_		_		_		
	\$	12,586,919	\$	6,060,473	\$	2,791,376	\$	1,468,815	\$	2,266,255

- (A) On October 1, 2012, Plug Power began providing services at a customer site under a Power Purchase Agreement (PPA) whereby Plug Power provides a turn-key solution to power the customer's entire fleet of material handling equipment in exchange for a monthly utility payment based on the amount of energy (kilograms of hydrogen) consumed each month. The elements of the contract include:
 - Power for 255 forklifts by replacing lead acid batteries with GenDrive fuel cells
 - On site, service and maintenance of the GenDrive fleet
 - Delivery of an estimated 250 kilograms of pressurized hydrogen on a daily basis.

The contract is a three year arrangement with an automatic three year renewal unless the customer provides at least 90 days written notice prior to the end of the initial 3 year term that they intend to cancel the agreement. Under the terms of the contract, Plug Power also guarantees 98% uptime on a weekly average basis for the lift truck fleet and has the right to manage the fleet spare unit and service requirements to achieve or exceed such targets.

On December 28, 2012, Plug Power sold the GenDrive units in use under the PPA to a third party and subsequently entered into a lease-back agreement with an effective start date of October 1, 2012, with the owner/lessor of the equipment to lease the equipment to Plug Power for a period of 6 years in order to fulfill obligations under the PPA, or at other customer sites as agreed to by the owner/lessor. This transaction has been recorded by the Company as a capital lease. Under the terms of the lease, Plug Power has received the rights to use the equipment for the full term of the lease provided there is no uncurred event of default under the lease.

- (B) The Company has several non-cancelable operating leases, primarily for hydrogen infrastructure and fork lift trucks that expire over the next five years. See Note 17 (Commitments and Contingencies) of the Consolidated Financial Statements for more detail.
- 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.
- (D) On October 1, 2012, we entered into a Power Purchase Agreement (PPA) under which it is providing a customer with 255 GenDrive units, service and maintenance of the units and daily delivery of hydrogen in exchange for a monthly utility payment tied to the amount of energy (kilograms of hydrogen) consumed each month. The PPA has an initial term of three years with an automatic three year renewal unless the customer terminates at the end of the initial 3 year term. In relationship to this agreement, the Company has contractual obligations to purchase \$71,280 of hydrogen on a quarterly basis through July 31, 2022.
- (E) 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.
- (F) 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.
- (G) We are a party to a loan and security agreement, as amended, the Loan Agreement with Silicon Valley Bank, or SVB, providing us with access to up to \$15.0 million of financing in the form of revolving loans, letters of credit, foreign exchange contracts and cash management services such as merchant services, direct deposit of payroll, business credit card and check cashing services. The Loan Agreement will expire on March 29, 2013. See Note 4 (Loan and Security Agreement) of the Consolidation Financial Statements for more detail.

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 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 3, 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's product and service warranty reserve as of December 31, 2012 is approximately \$2.7 million and is included in product warranty reserve in the consolidated balance sheets. Included in this balance is approximately \$2.0 million related to specific GenDrive component quality issues that were identified during the year ended December 31, 2012.

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.

Warrant accounting

Warrant Accounting: We account for common stock warrants in accordance with applicable accounting guidance provided in Accounting Standards Codification (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 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), December 31, 2011, and December 31, 2012 were 0.75%, 0.33% and 0.31%, respectively. The volatility of the market price of the Company's common stock for May 31, 2011, December 31, 2011 and December 31, 2012 were 94.4%, 78.6%, and 73.5%, respectively. The expected average term of the warrant used for all 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. Generally, as the market price of our common stock increases, the fair value of the warrant increases, and conversely, as the market price of our common stock decreases, the fair value of the warrant decreases. Also, a significant increase in the volatility of the market price of the Company's common stock, in isolation, would result in a significantly higher fair value measurement; and a significant decrease in volatility would result in a significantly lower fair value measurement. Changes in the fair value of the warrants are reflected in the condensed consolidated statement of operations as change in fair value of common stock warrant liability.

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.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

From time to time, we may invest our 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. 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.

Our exposure to changes in foreign currency rates is primarily related to sourcing inventory from foreign locations. This practice can give rise to foreign exchange risk resulting from the varying cost of inventory to the receiving location. 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, 2012.

(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 2013 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 2013 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 2013 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 2013 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)		exerc outstan	ated average ise price of ding options, ts 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	11,407,263 ((1)	\$	3.43	5,773,757 (2	2)	
Equity compensation plans not approved by security holders Total	11,407,263	<u> </u>	\$ \$	3.43	5,773,757		

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 2013 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 2013 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission.

⁽¹⁾ Represents 9,421,008 outstanding common stock warrants, 947,305 outstanding options issued under the 1999 Stock Option Plan, and 1,038,950 outstanding options issued under the 2011 Stock Option Plan.

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

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.

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.

J	Andrew Marsh, President, Chief Executive Officer and
By:	/s/ ANDREW MARSH
PLUC	G POWER INC.

Director

Date: April 1, 2013

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: April 1, 2013

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)	April 1, 2013
/s/	GERALD A. ANDERSON Gerald A. Anderson	Chief Financial Officer (Principal Financial Officer)	April 1, 2013
/s/	LARRY G. GARBERDING Larry G. Garberding	Director	April 1, 2013
/s/	MAUREEN O. HELMER Maureen O. Helmer	Director	April 1, 2013
/s/	DOUGLAS T. HICKEY Douglas T. Hickey	Director	April 1, 2013
/s/	GEORGE C. McNAMEE George C. McNamee	Director	April 1, 2013
/s/	EVGENY MIROSCHNICHENKO Evgeny Miroschnichenko	Director	April 1, 2013
/s/	EVGENY RASSKAZOV Evgeny Rasskazov	Director	April 1, 2013
/s/	GARY K. WILLIS Gary K. Willis	Director	April 1, 2013

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	Amendment No. 4 To Shareholder Rights Agreement. (24)
4.7	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	Executive Employment Agreement, dated as of June 21, 2012, by and between Gerald A. Anderson and Plug Power Inc. (22)
10.13	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)
10.14	Master and Shareholders' Agreement, dated as of January 24, 2012, by and between Axane S.A. and Plug Power, Inc. (18)
10.15	License Agreement dated as of February 29, 2012, by and between Hypulsion, S.A.S. and Plug Power Inc. (18)
10.16	2011 Stock Option and Incentive Plan. (12)
10.17	Amendment No. 1 to the Plug Power Inc. 2011 Stock Option and Incentive Plan (21)
10.18	Form of Incentive Stock Option Agreement. (15)
10.19	Form of Non-Qualified Stock Option Agreement for Employees. (15)
10.20	Form of Non-Qualified Stock Option Agreement for Independent Directors. (15)
10.21	Form of Restricted Stock Award Agreement. (15)
10.22	Loan and Security Agreement, dated as of August 9, 2011, by and between Plug Power Inc. and Silicon Valley Bank. (15)
10.23	First Loan Modification Agreement, dated as of September 28, 2011, by and between Plug Power Inc. and Silicon Valley Bank. (16)
10.24	Second Loan Modification Agreement, dated as of March 30, 2012, by and between Plug Power Inc. and Silicon Valley Bank. (20)
10.25	Third Loan Modification Agreement, dated as of November 29, 2012, by and between Plug Power Inc. and Silicon Valley Bank. (23)

- 23.1 Consent of KPMG LLP. (25)
- 31.1 and 31.2 Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. (25)
- 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.(25)
- 101.INS XBRL Instance Document (25)
- 101.SCH XBRL Taxonomy Extension Schema Document (25)
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase (25)
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document (25)
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document (25)
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document (25)
- (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 13, 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 19, 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.
- $(20) \, Incorporated \, \, by \, reference \, to \, the \, Company's \, current \, Report \, on \, Form \, 8-K \, \, dated \, \, April \, 3, \, 2012.$
- $(21) Incorporated \ by \ reference \ to \ the \ Company's \ current \ Report \ on \ Form \ 8-K \ dated \ May \ 18, 2012.$
- (22) Incorporated by reference to the Company's current Report on Form 8-K dated June 21, 2012.
- (23) Incorporated by reference to the Company's current Report on Form 8-K dated December 5, 2012.
- (24) Incorporated by reference to the Company's current Report on Form 8-K dated February 13, 2013.
- (25) 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, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012. 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 statements 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 audit 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, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, 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.

The accompanying consolidated financial statements and financial statement schedule have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has experienced a substantial decline in working capital, that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements and financial statement schedule do not include any adjustments that might result from the outcome of this uncertainty.

/S/ KPMG LLP

Albany, New York April 1, 2013

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PLUG POWER INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

	D	ecember 31, 2012	De	ecember 31, 2011
Assets		2012		2011
Current assets:				
Cash and cash equivalents	\$	9,380,059	\$	13,856,893
Accounts receivable, net		4,021,725		13,388,909
Inventory		8,550,457		10,354,707
Prepaid expenses and other current assets		1,988,457		1,894,014
Total current assets		23,940,698		39,494,523
Property, plant, and equipment, net		6,708,237		8,686,840
Leased property under capital lease, net		2,969,799		-
Note receivable		570,697		-
Intangible assets, net		5,270,571		7,474,636
Total assets	\$	39,460,002	\$	55,655,999
Liabilities and Stockholders' Equity				
Current liabilities:				
Borrowings under line of credit	\$	3,380,835	\$	5,405,110
Accounts payable		3,558,157		4,668,721
Accrued expenses		3,828,045		3,172,998
Product warranty reserve		2,671,409		1,210,909
Deferred revenue		2,950,375		2,505,175
Obligations under capital lease		650,379		-
Other current liabilities		-		80,000
Total current liabilities		17,039,200		17,042,913
Obligations under capital lease		1,304,749		-
Deferred revenue		4,362,092		3,036,829
Common stock warrant liability		475,825		5,320,990
Other liabilities		1,247,833		1,219,602
Total liabilities		24,429,699		26,620,334
Stockholders' equity:				
Common stock, \$0.01 par value per share; 245,000,000 shares authorized;				
Issued (including shares in treasury):				
38,404,764 at December 31, 2012 and 22,924,411 at December 31, 2011		384,048		229,244
Additional paid-in capital		801,840,491	7	784,213,871
Accumulated other comprehensive income		1,004,412		928,744
Accumulated deficit	(786,646,266)	(7	754,783,812)
Less common stock in treasury:				
165,906 shares at December 31, 2012 and December 31, 2011	_	(1,552,382)		(1,552,382)
Total stockholders' equity		15,030,303		29,035,665
Total liabilities and stockholders' equity	\$	39,460,002	\$	55,655,999

PLUG POWER INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

For the years ended December 31, 2012, 2011 and 2010

	2012	2011	2010
Product and service revenue	\$ 24,407,127	\$ 23,223,265	\$ 15,738,841
Research and development contract revenue	1,701,330	3,886,114	3,597,870
Licensed technology revenue	-	 516,563	135,938
Total revenue	26,108,457	27,625,942	19,472,649
Cost of product and service revenue	37,657,699	30,669,602	23,111,151
Cost of research and development contract revenue	2,804,817	6,232,210	6,370,797
Research and development expense	5,434,235	5,655,748	12,901,170
Selling, general and administrative expenses	14,576,998	14,545,965	25,572,364
Gain on sale of assets	-	(673,358)	(3,217,594)
Amortization of intangible assets	 2,306,489	2,322,876	2,263,627
Operating loss	(36,671,781)	(31,127,101)	(47,528,866)
Interest and other income and net realized losses	226 120	249,420	1.056.022
from available-for-sale securities	226,120	248,430	1,056,932
Change in fair value of common stock warrant liability	4,845,165	3,447,153	(5.077.922)
Change in fair value of auction rate securities repurchase agreement Net trading gain	-	-	(5,977,822)
Interest and other expense and foreign currency gain (loss)	(261,958)	(22,436)	5,977,822 (486,987)
interest and other expense and foreign currency gain (loss)	 (201,730)	(22,430)	(400,707)
Net loss	\$ (31,862,454)	\$ (27,453,954)	\$ (46,958,921)
Loss per share:			
Basic and diluted	\$ (0.93)	\$ (1.46)	\$ (3.58)
Weighted average number of common shares outstanding	34,376,427	18,778,066	13,123,162

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.

PLUG POWER INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS For the years ended December 31, 2012, 2011 and 2010

	2012	 2011	 2010
Net Loss	\$ (31,862,454)	\$ (27,453,954)	\$ (46,958,921)
Other comprehensive (loss) income:			
Foreign currency translation gain (loss)	75,668	(55,626)	276,959
Unrealized gain (loss) on available-for-sale securities, net	-	18,502	(114,300)
Comprehensive Loss	\$ (31,786,786)	\$ (27,491,078)	\$ (46,796,262)

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

For the years ended December 31, 2012, 2011 and 2010

	Commoi Shares	ı Stock Amount	Additional Paid- in-Capital	Accumulated Other Comprehensive Income (Loss)	Trea Shares	sury Stock Amount	Total Stockholders' Equity	
December 31, 2009	13,059,124	\$ 1,305,913	\$ 767,808,572	\$ 803,209	98,620	\$ (1,278,004)	\$ (680,370,937)	\$ 88,268,753
Net loss	_	_	-	-	-	_	(46,958,921)	(46,958,921)
Other comprehensive income	-	-	-	162,659	-	-	-	162,659
Stock based compensation	310,800	31,079	1,851,299	-	-	-	-	1,882,378
Reclassification adjustment - stock split	-	(1,203,293)	1,203,293	-	-	-	-	-
Purchase of treasury stock					81,829	(441,506)		(441,506)
December 31, 2010	13,369,924	\$ 133,699	\$ 770,863,164	\$ 965,868	180,449	\$ (1,719,510)	\$ (727,329,858)	\$ 42,913,363
Net loss	-	-	-	-	-	-	(27,453,954)	(27,453,954)
Other comprehensive loss	-	-	-	(37,124)	-	-	-	(37,124)
Stock based compensation	221,737	2,217	1,848,330	-	833	(3,030)	-	1,847,517
Public offering common stock, net	9,332,750	93,328	11,831,027	-	-	-	-	11,924,355
Issuance of treasury shares	-	-	(328,650)	-	(35,000)	328,650	-	-
Purchase of treasury shares					19,624	(158,492)		(158,492)
December 31, 2011	22,924,411	\$ 229,244	\$ 784,213,871	\$ 928,744	165,906	\$ (1,552,382)	\$ (754,783,812)	\$ 29,035,665
Net loss	-	=	-	-	-	-	(31,862,454)	(31,862,454)
Other comprehensive income	-	-	-	75,668	-	-	-	75,668
Stock based compensation	530,353	5,304	1,985,850	-	-	-	-	1,991,154
Public offering common stock, net	14,950,000	149,500	15,640,770					15,790,270
December 31, 2012	38,404,764	\$ 384,048	\$ 801,840,491	\$ 1,004,412	165,906	\$ (1,552,382)	\$ (786,646,266)	\$ 15,030,303

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.

PLUG POWER INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

Years ended December 31, 2012, 2011 and 2010

Years ended December 31, 2012, 2011 and 201	2012	2011	2010
Cash Flows From Operating Activities:			
Net loss	\$ (31,862,454)	\$ (27,453,954)	\$ (46,958,921)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation of property, plant and equipment, and investment in leased property	2,069,672	2,132,117	4,969,263
Amortization of intangible assets	2,306,489	2,322,876	2,263,627
Stock-based compensation	2,001,840	1,452,259	1,174,576
Loss on disposal of property, plant and equipment	51,975	308,621	86,794
(Gain) loss on sale of leased assets	20,068	(673,358)	290,491
Provision for bad debts	-	-	10,160
Realized loss on available for sale securities	-	22,421	-
Net unrealized gains on trading securities	-	-	(5,977,822)
Change in fair value of auction rate debt securities repurchase agreement	-	-	5,977,822
Change in fair value of common stock warrant liability	(4,845,165)	(3,447,153)	-
Changes in operating assets and liabilities that provide (use) cash:			
Accounts receivable	9,367,539	(9,192,901)	(2,193,325)
Inventory	(1,294,671)	1,438,195	(4,409,582)
Prepaid expenses and other current assets	(94,443)	(310,089)	1,624,422
Note receivable	(570,697)	-	-
Accounts payable, accrued expenses, product warranty reserve and other liabilities	914,388	(1,101,356)	2,618,994
Deferred revenue	1,770,463	1,192,255	(246,968)
Net cash used in operating activities	(20,164,996)	(33,310,067)	(40,770,469)
Cash Flows From Investing Activities:			
Purchase of property, plant and equipment	(77,527)	(1,326,144)	(1,100,478)
Investment in leased property, net	-	-	(2,233,334)
Restricted cash	-	525,000	1,740,405
Proceeds from disposal of property, plant and equipment	63,605	46,650	121,564
Proceeds from sale of leased assets	· -	673,358	3,221,168
Proceeds from trading securities	-	-	59,375,001
Proceeds from maturities and sales of available-for-sale securities	-	10,399,396	79,754,039
Purchases of available-for-sale securities	-	-	(42,311,734)
Net cash (used in) provided by investing activities	(13,922)	10,318,260	98,566,631
Cash Flows From Financing Activities:			
Purchase of treasury stock	_	(158,492)	(441,506)
Proceeds from issuance of common stock and warrants	17,192,500	22,583,877	(111,500)
Stock issuance costs	(1,402,230)	(1,891,378)	_
Proceeds (repayment) of borrowings under line of credit	(2,024,275)	5,405,110	(59,375,000)
Proceeds from long-term debt	2,105,282	-	(37,373,000)
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Principal payments on long-term debt	(170,222)	(9,956)	(1,561,371)
Net cash provided by (used in) financing activities	15,701,055	25,929,161	(61,377,877)
Effect of exchange rate changes on cash	1,029	(35,864)	(43,865)
Increase (decrease) in cash and cash equivalents	(4,476,834)	2,901,490	(3,625,580)
Cash and cash equivalents, beginning of year	13,856,893	10,955,403	14,580,983
Cash and cash equivalents, end of year	\$ 9,380,059	\$ 13,856,893	\$ 10,955,403

PLUG POWER INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Nature of Operations

Description of Business

Plug Power Inc., 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, or 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, or OEMs, and their dealer networks. We sell to businesses, government agencies and commercial consumers.

We were organized in the State of Delaware on June 27, 1997. 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., or Cellex, and General Hydrogen Corporation, or General Hydrogen. 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.

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 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

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. If we are unable to fund our operations without additional external financing and therefore cannot sustain future operations, we may be required to delay, reduce and/or cease our operations and/or seek bankruptcy protection.

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. We adopted a restructuring plan on December 11, 2012, aimed at improving organizational efficiency and conserving working capital needed to support the growth of our GenDrive business. As a result of the 2012 overall restructuring, we expect that annual expenses will be reduced by \$3.0 to \$4.0 million.

The Company incurred net losses of \$31.9 million, \$27.5 million and \$47.0 million for the years ended December 31, 2012, 2011 and 2010, respectively, and has an accumulated deficit of \$786.6 million at December 31, 2012. Substantially all of our accumulated deficit has resulted from costs incurred in connection with our research and development expenses general and administrative costs associated with our operations. We expect that for fiscal year 2013, our operating cash burn will be approximately \$10-\$15 million.

Net cash used in operating activities for the year ended December 31, 2012 was \$20.2 million. Additionally, on December 31, 2012, we had cash and cash equivalents \$9.4 million and net working capital of \$6.9 million. This compares to \$13.9 million and \$22.5 million, respectively, at December 31, 2011.

We are party to a Loan and Security Agreement with Silicon Valley Bank, or SVB, which expired as of March 29, 2013. The SVB loan facility provided up to \$15 million of availability, subject to borrowing base limitations, to support working capital needs. Given its expiration, we no longer have access to this facility. As of December 31, 2012, \$3.4 million was outstanding under the loan agreement. This amount was subsequently paid in full in January, 2013. The Company maintains all of its operating bank accounts with SVB and will continue to assess opportunities to reestablish a credit facility with SVB.

To date, we have funded our operations primarily through public and private offerings of common and preferred stock, our line of credit and maturities and sales of our available-for-sale securities. The Company believes it has potential financing sources in order to raise the capital necessary to fund operations through fiscal year end 2013. The Company's current sources of capital include the raising of \$2.4 million in a public equity offering completed in February, 2013, and the completion of a sale leaseback of its real estate in Latham, NY on March 27, 2012 as more fully described in Note 21, Subsequent Events of the consolidated financial statements. We believe that our current cash, cash equivalents and cash generated from future sales will provide sufficient liquidity to fund our operations into May 2013. This projection is based on our current expectations regarding product sales, cost structure, cash burn rate and operating assumptions.

In addition to the aforementioned current sources of capital that will provide additional short term liquidity, the Company is currently exploring various other alternatives including debt and equity financing vehicles, strategic partnerships, government programs that may be available to the Company, a sale of the Company, as well as trying to generate additional sales and increase margins. However, at this time the Company has no commitments to obtain any additional funds, and there can be no assurance such funds will be available on acceptable terms or at all. If the Company is unable to obtain additional funding and improve its operations, the Company's financial condition and results of operations may be materially adversely affected and the Company may not be able to continue operations.

Additionally, even if we raise sufficient capital through additional equity or debt financing, strategic alternatives or otherwise, there can be no assurances that the revenue or capital infusion will be sufficient to enable us to develop our business to a level where it will be profitable or generate positive cash flow. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted, and these newly issued securities may have rights, preferences or privileges senior to those of existing stockholders. If we incur additional debt, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. The terms of any debt securities issued could also impose significant restrictions on our operations. Broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance, and may adversely impact our ability to raise additional funds. Similarly, if our common stock is delisted from the NASDAQ Capital Market, it may limit our ability to raise additional funds 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.

The consolidated financial statements for the year ended December 31, 2012 were prepared on the basis of a going concern which contemplates that the Company will be able to realize assets and discharge liabilities in the normal course of business. Accordingly, they do not give effect to adjustments that would be necessary should the Company be required to liquidate its assets. The ability of the Company to meet its total liabilities of \$24.4 million at December 31, 2012, and to continue as a going concern is dependent upon the availability of future funding, continued growth in orders and shipments, and the Company's ability to profitably meet its after-sale service commitments with its existing customers. The financial statements do not include any adjustments that might result from the outcome of these uncertainties.

Public Offering

Refer to Note 5, Stockholders' Equity, for information regarding our 2012 and 2011 public offerings.

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.

Subsequent to the original issuance of the December 31, 2011 consolidated financial statements, the Company identified an immaterial error related to the presentation of deferred revenue within the consolidated balance sheets as of December 31, 2011. Such error has been corrected in the accompanying consolidated balance sheets through a reduction to deferred revenue within current liabilities and a corresponding increase to deferred revenue within non-current liabilities in the amounts of \$3,036,829 as of December 31, 2011. This correction does not affect previously reported total liabilities in the accompanying consolidated balance sheets, and had no effect on the previously reported consolidated statements of operations, comprehensive loss, stockholders' equity, or cash flows for any period.

Cash Equivalents

Cash equivalents consist of money market accounts 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.

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 and 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. As of December 31, 2012 and December 31, 2011, the allowance for doubtful accounts was \$0.

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, 2012 and 2011, inventory on consignment was valued at approximately \$406,000 and \$178,000, 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.

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

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 generally on a straight line basis.

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, 2012 and 2011, the Company had unbilled amounts from product and service revenue in the amount of approximately \$118,000 and \$0, respectively, and is included in other current assets in the consolidated balance sheets. At December 31, 2012 and 2011, the Company had deferred product and service revenue in the amount of \$7.3 million and \$5.5 million, respectively, and is included in deferred revenue in the consolidated balance sheets.

Product Warranty Reserve

Our product and service revenue contracts 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's product and service warranty reserve as of December 31, 2012 is approximately \$2,671,000 and is included in product warranty reserve in the consolidated balance sheets. Included in this balance is approximately \$2.0 million related to specific GenDrive component quality issues that were identified during the year ended December 31, 2012.

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, 2012 and 2011, the Company had unbilled amounts from research and development contract revenue in the amount of approximately \$182,000 and \$252,000, respectively and is included in other current assets in the consolidated balance sheets. Unbilled amounts at December 31, 2012 are expected to be billed during the first quarter of 2013.

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

Leased Property Under Capital Lease

Leased property under capital lease is stated at the present value of minimum lease payments. Amortization expense is recorded on a straight-line basis over 6 years, the shorter of the lease term and the estimated useful life of the asset. Amortization expense amounted to \$129,122 in 2012 and has been included in cost of product and service revenue in the accompanying consolidated statements of operations.

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.

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 December 31, 2012, December 31, 2011 and May 31, 2011 (issuance date), were .31%, .33% and .75%, respectively. The volatility of the market price of the Company's common stock for December 31, 2012, December 31, 2011 and May 31, 2011 were 73.5%, 78.6%, and 94.4%, respectively. The expected average term of the warrant used for all 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.

Research and Development

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

Joint Venture

We account for investments in joint ventures in which we have significant influence in accordance with applicable accounting guidance in Subtopic 323-10, *Investments – Equity Method and Joint Ventures – Overall*. On February 29, 2012 we completed the formation of our joint venture with Axane, S.A., a subsidiary of Air Liquide, under the name HyPulsion (the JV). The principal purpose of the JV is to develop and sell hydrogen fuel cell systems for the European material handling market. Axane contributed cash at the closing and will make additional fixed cash contributions in 2013 and 2014 in exchange for 55% ownership of the JV, subject to certain conditions. We contributed to the JV the right to use our technology, including design and technology know-how on GenDrive systems, in exchange for 45% ownership of the JV. Accordingly, we will share in 45% of the profits from the JV. We have not contributed any cash to the JV and we are not obligated to contribute any cash. We have an option in the future to contribute cash and become a majority owner of the JV.

In accordance with the equity method of accounting, the Company will increase its investment in the JV by its share of any earnings, and decrease its investment in the JV by its share of any losses. Losses in excess of the investment must be restored from future profits before we can recognize our proportionate share of profits. As of December 31, 2012, the Company had a zero basis for its investment in the JV.

Stock-Based Compensation

The Company maintains employee stock-based compensation plans, which are described more fully in Note 6, 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, 2012, 2011 and 2010 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,					
		2012		2011		2010
Numerator:						
Net loss	\$	(31,862,454)	\$	(27,453,954)	\$	(46,958,921)
Denominator:						
Weighted average number of common shares						
outstanding		34,376,427		18,778,066		13,123,162

The dilutive potential common shares are summarized as follows:

	At December 31,			
	2012		2010	
Stock options outstanding	1,986,255	1,948,997	432,846	
Unvested restricted stock	-	280,771	437,958	
Common stock warrants (1)	9,421,008	7,128,563	57,143	
Number of dilutive potential common shares	11,407,263	9,358,331	927,947	

⁽¹⁾ On May 31, 2011, the Company granted 7,128,563 warrants as part of an underwritten public offering. As a result of the March 28 and 29, 2012 public offerings described in Note 5, the number of warrants increased to 9,421,008.

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 21, 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 February 2013, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2013-02, "Reporting of Amounts Reclassified Out of Accumulated Other Comprehensive Income". This ASU adds new disclosure requirement for items reclassified out of accumulated other comprehensive income ("AOCI"). The ASU is effective for fiscal years, and interim periods within those years, beginning on or after December 15, 2012 and must be applied prospectively. The Company is evaluating the impact of the standard on its consolidated financial statements and related disclosures.

In December 2011, the FASB issued ASU No. 2011-11, "Balance Sheet (Topic 210): Disclosures about Offsetting Assets and Liabilities". ASU 2011-11 requires an entity to disclose information about offsetting and related arrangements to enable users of its financial statements to understand the effect of those arrangements on its financial position. ASU No. 2011-11 is effective for interim and annual periods beginning on or after January 1, 2013 and will be applied retrospectively. The Company does not expect the adoption of ASU 2011-11 to have a material impact on its consolidated financial statements.

3. 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.

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. At December 31, 2012 and 2011 there was approximately \$560,000 and \$910,000 included in deferred revenue in the consolidated balance sheets related to these transactions.

4. Loan and Security Agreement

At December 31, 2012, we were a party to a loan and security agreement, as amended, the Loan Agreement with Silicon Valley Bank, or SVB, providing us with access to up to \$15.0 million of financing in the form of revolving loans, letters of credit, foreign exchange contracts and cash management services such as merchant services, direct deposit of payroll, business credit card and check cashing services. On November 29, 2012 we executed a Third Loan Modification Agreement with SVB, which, among other things, waived our failure to comply with the Adjusted Quick Ratio financial covenant as of the months ended September 30, 2012 and October 31, 2012, revised the future Adjusted Quick Ratio covenant level and removed our ability to request financing for Inventory Placeholder Invoices. The Loan Agreement expired on March 29, 2013.

Advances under the Loan Agreement could not exceed a borrowing base limit calculated using an advanced rate of 80% on our eligible accounts receivable, subject to certain reserves established by SVB and other adjustments.

Interest on advances of credit under the Loan Agreement for financed accounts receivables were equal to SVB's prime rate, which was 3.25% per annum at December 31, 2012, plus 3.0% per annum or, if we maintained 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. The minimum monthly interest charge was \$6,000 per month.

The Loan Agreement was secured by substantially all of our properties, rights and assets, including substantially all of our equipment, inventory, receivables, intellectual property and general intangibles.

The Loan Agreement included customary representations and warranties for credit facilities of this type. In addition, the Loan Agreement contained a number of covenants that imposed significant operating and financial restrictions on our operations, including restrictions pertaining to, among other things: the condition of inventory; maintenance of an adjusted quick ratio of at least 1.25 to 1.0; intellectual property right protection and registration; dispositions of assets; changes in business, management, ownership or business locations; mergers, consolidations or acquisitions; incurrence or assumption of indebtedness; incurrence of liens on any of our property; paying dividends or making distributions on, or redemptions, retirements or repurchases of, capital stock; transactions with affiliates; and payments on or amendments to subordinated debt. At December 31, 2012 we were in compliance with all covenants except the Adjusted Quick Ratio covenant.

The Loan Agreement also contained events of default customary for credit facilities of this type with, in some cases, corresponding grace periods, including, failure to pay any principal or interest when due, failure to comply with covenants, any material adverse change occurring, an attachment, levy or restraint on our business, certain bankruptcy or insolvency events, payment defaults relating to, or acceleration of, other indebtedness or that could result in a material adverse change to our business, we or our subsidiaries becoming subject to judgments, claims or liabilities in an amount individually or in aggregate in excess of \$150,000, any misrepresentations, or any revocation, invalidation, breach or invalidation of any subordinated debt.

As of December 31, 2012, \$3.4 million was outstanding under the loan agreement. This amount was subsequently paid in full in January, 2013.

In September 2011, we signed a letter of credit with SVB in the amount of \$525,000. The standby letter of credit is required by the agreement negotiated between Air Products and Chemicals, Inc., or Air Products, and us to supply hydrogen infrastructure and hydrogen to Central Grocers at their distribution center. There are no collateral requirements associated with this letter of credit.

5. Stockholders' Equity

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, 2012 and 2011 there were 38,238,858 and 22,758,505, respectively shares of common stock issued and outstanding.

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, 2012 and 2011, 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, 2012 and 2011, there were no shares of Series A Junior Participating Cumulative Preferred Stock issued and outstanding.

Equity Issuances and Related Activity

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). 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 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. The warrants are exercisable upon issuance and will expire on May 31, 2016. The exercise price of the warrants upon issuance was \$3.00 per share of common stock and is subject to weighted average anti-dilution provisions in the event of issuance of additional shares of common stock and certain other conditions, as further described in the warrant agreement. Additionally, 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. As a result of the March 28 and 29, 2012 public offerings and pursuant to the effect of the anti-dilution provisions, the exercise price of the warrants was reduced to \$2.27 per share of common stock. Simultaneously with the adjustment to the exercise price, the number of common stock shares that may be purchased upon exercise of the warrants was increased to 9,421,008 shares.

On June 8, 2011, the Company sold 836,750 additional shares of common stock, pursuant to the underwriter's partial exercise of its overallotment 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 overallotment option, resulting in additional net proceeds to Plug Power of \$527,626.

On March 28, 2012, the Company completed an underwritten public offering of 13,000,000 shares of its common stock. The shares were sold at \$1.15 per share. Net proceeds, after underwriting discounts and commissions and other fees and expenses payable by Plug Power were \$13,704,745.

On March 29, 2012, the Company sold 1,950,000 additional shares of common stock at \$1.15 per share, pursuant to the underwriter's exercise of its over-allotment option in connection with the March 28, 2012 underwritten public offering, resulting in additional net proceeds to Plug Power of \$2,085,525.

6. Employee Benefit Plans

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. On May 16, 2012, the stockholders approved an amendment to the 2011 Plan, to increase the number of shares of the Company's common stock authorized for issuance under the 2011 Plan from 1,000,000 to 6,500,000.

At December 31, 2012 there were approximately 2.0 million options granted and outstanding and 5.8 million 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 \$1,408,000 of the total share-based payment expense recorded for the year ended December 31, 2012. The Company estimates the fair value of stock options 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 78,400, 1,618,400 and 150,500 options granted during the years ended December 31, 2012, 2011 and 2010, respectively were as follows:

	2012	2011	2010
Dividend yield:	0%	0%	0%
Expected term of options (years):	6	6	6
Risk free interest rate:	0.80%-1.16%	1.16%-2.61%	1.52%-2.93%
Volatility:	80%	74%-79%	94%-95%

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, 2012 is as follows:

	Shares	Av	Weighted gerage Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Instrinsic Value
Options outstanding at December 31, 2011	1,948,997	\$	9.84	8.8	\$ -
Granted	78,400		1.22	9.3	-
Exercised	-		-	-	-
Forfeited	(16,471)		5.89	-	-
Expired	(24,671)		56.06	-	-
Options outstanding at December 31, 2012	1,986,255	\$	8.95	7.9	
Options exercisable at December 31, 2012	870,918		16.01	6.9	-
Options unvested at December 31, 2012	1,115,337		3.45	8.7	-

The weighted average grant date fair value of options granted during the years ended December 31, 2012, 2011 and 2010 was \$0.83, \$3.58 and \$3.80, respectively. There were no stock options exercised during the year ended December 31, 2012. As of December 31, 2012, there was approximately \$1,897,000 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, 2012 and 2011 was approximately \$1,407,000 and \$952,000, 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 did not issue any restricted stock awards in 2012, and therefore no expense associated with restricted stock awards was recorded in 2012. Additionally, 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, 2012 is as follows:

		Aggregate		
		Intrinsic		
	Shares	Value		
Unvested restricted stock at December 31, 2011	280,771	\$	572,773	
Forfeited	(280,771)		(572,773)	
Unvested restricted stock at December 31, 2012		\$	-	

For the years ended December 31, 2012, 2011, and 2010, the Company recorded expense of approximately \$2.0 million, \$1.5 million, and \$1.2 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 403,579, 133,748 and 90,166 shares of common stock to the Plug Power Inc. 401(k) Savings & Retirement Plan during 2012, 2011 and 2010, 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 \$436,000, \$374,000 and \$441,000 for years ended December 31, 2012, 2011 and 2010, 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.

In 2012, 2011 and 2010, no threshold, target or stretch revenue and EBITDAS performance-based metrics were reached. Accordingly, no restrictions have lapsed, and 55%, 25%, and 20% of the total awarded RSUs were forfeited for the 2012, 2011 and 2010 fiscal years, respectively. Therefore, no expense was recorded during the years ended December 31, 2012, December 31, 2011, and December 31, 2010, respectively, associated with these awards.

7. Inventory

Inventory as of December 31, 2012 and December 31, 2011 consisted of the following:

	Decer	December 31, 2012		ember 31, 2011
Raw materials and supplies	\$	7,576,862	\$	9,159,004
Work-in-process		314,321		462,832
Finished goods		659,274		732,871
	\$	8,550,457	\$	10,354,707

8. Note Receivable

On May 25, 2012, we executed a \$663,359 Promissory Note with Forem Energy Group, maturing on May 25, 2022. This note is unsecured and bears interest at an annual rate of 2.9%. Accordingly, receivables relating to this agreement in the amount of \$570,697 and \$59,017 have been recorded as note receivable and current portion note receivable (prepaid expenses and other current assets), respectively, in the consolidated balance sheets as of December 31, 2012.

9. Property, Plant and Equipment

Property, plant and equipment at December 31, 2012 and 2011 consist of the following:

	D	ecember 31, 2012]	December 31, 2011
Land	\$	90,000	\$	90,000
Buildings		15,332,232		15,332,232
Building improvements		4,939,283		4,939,283
Software, machinery and equipment		13,741,573		13,941,438
		34,103,088		34,302,953
Less accumulated depreciation		(27,394,851)		(25,616,113)
Property, plant, and equipment, net	\$	6,708,237	\$	8,686,840

Depreciation expense related to property, plant and equipment was \$1.9 million, \$2.1 million and \$5.0 million for the years ended December 31, 2012, 2011 and 2010, 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.

10. 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, 2012 are as follows:

	Weighted Average Amortization Period	Gro	oss Carrying Amount	Accumulated Amortization	Effect of eign Currency Translation	 Total
Acquired Technology	8 years	\$	15,900,000	\$ (12,156,049)	\$ 1,234,953	\$ 4,978,904
Customer Relationships	8 years		1,000,000	(708,333)	-	291,667
		\$	16,900,000	\$ (12,864,382)	\$ 1,234,953	\$ 5,270,571

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	oss Carrying Amount	Accumulated Amortization	Effect of reign 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

Amortization expense for acquired identifiable intangible assets for the years ended December 31, 2012, 2011, and 2010 was \$2.3 million, and \$2.3 million, respectively. Estimated amortization expense for subsequent years is as follows:

2013	\$ 2,310,532
2014	2,310,532
2015	649,507
Total	\$ 5,270,571

11. Accrued Expenses

Accrued expenses at December 31, 2012 and 2011 consist of:

	 2012	2011		
Accrued payroll and compensation related costs	\$ 708,495	\$	1,687,965	
Accrued restructuring costs	144,489		109,978	
Accrued dealer commissions and customer rebates	1,097,498		132,850	
Other accrued liabilities	 1,877,563		1,242,205	
Total	\$ 3,828,045	\$	3,172,998	

12. Restructuring Charges

On December 11, 2012, we adopted a restructuring plan to improve organizational efficiency and conserve working capital needed to support the growth of our GenDrive business. In doing so, 22 full-time positions were eliminated at our U.S. facilities. This workforce reduction was substantially completed on December 13, 2012. As a result of the overall restructuring, we expect to reduce annual expenses by \$3.0 to \$4.0 million. The Company recorded restructuring charges of \$286,000 within selling, general and administrative expenses in the consolidated statement of operations for the year ended December 31, 2012 related to this restructuring. At December 31, 2012, approximately \$136,000 remains in accrued expenses on the consolidated balance sheets.

During 2010 and 2008, the Company adopted three separate restructuring plans to focus and align the Company on its objectives, including: a plan to focus and align the Company on its GenDrive business, and two plans to focus the Company on becoming a market and sales driven organization. As part of these plans, the Company implemented reductions in workforce, terminated purchase commitments, cut back discretionary spending, deferred non-strategic projects, and consolidated all operations to its Latham, New York headquarters. The Company recorded restructuring charges and revisions to previous estimates in the amount of \$0, \$232,054 and \$7,592,021 within selling, general and administrative expenses in the consolidated statement of operations for the years ended December 31, 2012, December 31, 2011 and December 31, 2010, respectively, related to these restructurings. At December 31, 2012, \$10,550 remains in accrued expenses on the consolidated balance sheets.

13. Fair Value Measurements

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

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

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

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

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

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.

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, 2012	Total	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)		Significant Other Unobservable Inputs (Level 3)
Common stock warrant liability	\$ 475,825	\$	- \$	-	\$ 475,825

			Quoted Price	s in Active	Significant		Significant
	Markets for Identical		Other Observab	le (Other Unobservable		
			Item	ns	Inputs		Inputs
Balance at December 31, 2011		Total	(Level 1)		(Level 2)		(Level 3)
		_					_
Common stock warrant liability	\$	5,320,990	\$	-	\$	- \$	5,320,990

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):

	Fair Value
	Measurement Using
	Significant
Common stock warrant liability	Unobservable Inputs
Beginning of period - January 1, 2012	\$ 5,320,990
Change in fair value of common stock warrants	(4,845,165)
Fair value of common stock warrant liability at December 31, 2012	\$ 475,825
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

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

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.

14. Income Taxes

The components of (loss) before income taxes and the provision for income taxes for the years ended December 31, 2012, 2011 and 2010 are as follows:

Loss before income taxes:	2012		2012		2012		2012		2012 2011		2012 2011		2010
United States	\$	(30,399,000)	\$	(25,483,000)	\$ (38,567,000)								
Foreign	(1,463,000)		(1,463,000) (1,971,000)		(8,392,000)								
	\$	(31,862,000)	\$	(27,454,000)	\$ (46,959,000)								

There was no current income tax expense for the years ended December 31, 2012, 2011 and 2010.

The significant components of U.S. deferred income tax expense (benefit) for the years ended December 31, 2012, 2011 and 2010 are as follows:

	2012 2011		2010	
Deferred tax expense (benefit)	\$	10,661,000	\$ 17,774,000	\$ (652,000)
Net operating loss carryforward expired (generated)		26,924,000	187,597,000	(14,168,000)
Valuation allowance (decrease) increase		(37,585,000)	(205,371,000)	14,820,000
Provision for Income taxes	\$	-	\$ -	\$

The significant components of Foreign deferred income tax expense (benefit) for the years ended December 31, 2012, 2011 and 2010 are as follows:

	2012	2011	2010
Deferred tax benefit	\$ (1,041,000)	\$ (1,268,000)	\$ (823,000)
Net operating loss carryforward expired (generated)	(79,000)	496,000	(1,081,000)
Valuation allowance increase	1,120,000	772,000	1,904,000
Provision for Income taxes	\$ -	\$ -	\$

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

	2012	2011	2010
U.S. Federal statutory tax rate	(35.0%)	(35.0%)	(35.0%)
Deferred state taxes, net of federal benefit	(3.3%)	(3.1%)	(2.4%)
Common stock warrant liability	(5.3%)	(4.4%)	0.0%
Other, net	0.1%	0.6%	(2.7%)
Change to uncertain tax positions	(1.6%)	(57.5%)	1.6%
Foreign tax rate differential	0.5%	0.8%	2.2%
Expiring attribute carryforward	0.0%	5.4%	1.2%
Adjustments to open deferred tax balance	(5.8%)	(1.7%)	0.3%
Writeoff of tax attributes due to imposition of Section			
382 limitation	165.7%	840.9%	0.0%
Tax credits	0.0%	(0.3%)	(0.6%)
Change in valuation allowance	(115.3%)	(745.7%)	35.4%
	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 purposes. Significant components of the Company's deferred tax assets and liabilities as of December 31, 2012 and 2011 are as follows:

	U.S.					Foreign			
		Years ended I	Decer	nber 31,		Years ended l	Decen	nber 31,	
	2012 2011			2012	2011				
Intangible assets	\$	130,000	\$	200,000	\$	694,000	\$	325,000	
Non-employee stock based compensation		(1,556,000)		(1,556,000)		-		-	
Deferred revenue		2,779,000		2,106,000		-		-	
Other reserves and accruals		1,621,000		1,121,000		-		-	
Research and development tax credit carryforwards				74,000		1,569,000		1,533,000	
Property, plant and equipment		1,541,000		1,127,000		541,000		529,000	
Amortization of stock-based compensation		8,495,000		7,900,000		-		-	
Capitalized research & development expenditures		15,846,000		15,162,000		5,384,000		4,760,000	
Section 382 recognized built in loss		(15,202,000)		(1,819,000)		-		-	
Net operating loss carryforwards		3,347,000		30,271,000		3,541,000		3,462,000	
Total deferred tax asset		17,001,000		54,586,000		11,729,000		10,609,000	

 Valuation allowance
 (17,001,000)
 (54,586,000)
 (11,729,000)
 (10,609,000)

 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, 2012 and 2011 of approximately \$28.7 million and \$65.2 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:	\$ \$ (2,000)		-		(2,000)
Decrease in valuation allowance for 382 limitations on tax attributes:	(26,924,000)		(26,924,000)		-
Increase in valuation allowance for current year net decrease in deferred tax					
assets other than net operating losses:	(10,288,000)		(10,661,000)		373,000
Increase in valuation allowance as a result of foreign currency fluctuation	246,000		-		246,000
Increase in valuation allowance due to current year change of deferred tax assets					
as the result of uncertain tax positions.	503,000		-		503,000
Net (decrease) increase in valuation allowance	\$ (36,465,000)	\$	(37,585,000)	\$	1,120,000

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, 2012 and December 31, 2011 are \$0.1 million and \$1.9 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, the Company has unused federal and state net operating loss carryforwards of approximately \$723 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 \$605.9 million was generated by the Company from operations through December 31, 2012. The net operating loss carryforwards if unused will expire at various dates from 2017 through 2032.

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 2012 and 2011 that resulted in all of the Company's federal and state net operating loss carryforwards being subject to IRC Section 382 limitations and as a result of IRC Section 382 limitations, all but approximately \$8.8 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, 2012.

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 \$40 million. This translates into unfavorable book to tax add backs in the Company's 2013 to 2017 U.S. corporate income tax returns that resulted in a gross deferred tax liability of \$15.2 million at December 31, 2012 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 \$15.6 million of Research Credit are subject to IRC Section 382 limitations and as a result of the IRC Section 382 limitations, the entire \$15.6 million will expire prior to utilization.

At December 31, 2012, the Company has unused foreign net operating loss carryforwards of approximately \$17.8 million. The net operating loss carryforwards if unused will expire at various dates from 2015 through 2032. At December 31, 2012 the company has Scientific Research and Experimental Development expenditures of \$22.3 million available to offset future taxable income. These expenditures have no expiry date. At December 31, 2012 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 2013 through 2027. Approximately \$3.6 million of the foreign net operating loss carryforwards, approximately \$0.8 million of the Scientific Research and Experimental Development expenditures and \$0.9 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, 2012.

As of December 31, 2012, the Company has no unrepatriated foreign earnings.

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

	2012	 2011	2010
Unrecognized tax benefits balance at beginning of year	\$ 2,046,000	\$ 17,893,000	\$ 18,570,000
Reductions for tax positions of prior years	(503,000)	(15,875,000)	(716,000)
Currency Translation	36,000	28,000	39,000
Unrecognized tax benefits balance at end of year	\$ 1,579,000	\$ 2,046,000	\$ 17,893,000

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, 2012, the Company recognized \$0 in interest and penalties. The Company had \$1.2 million in interest and penalties accrued at December 31, 2012.

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 2009 to 2012. Open tax years in the foreign jurisdictions range from 2005 to 2012. 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, 2012, 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.

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.

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, 2012, 2011 and 2010:

	2	2012		2011		2010
Stock-based compensation accrual impact, net	\$	(10,687)	\$	395,257	\$	707,802
Change in unrealized loss/gain on available for sale securities		-		18,502		(114,300)
Cash paid for interest		255,896		12,634		471,386
Transfer of property, plant and equipment to assets held for sale		-		-		768,779
Transfer of investment in leased property to inventory		-		253,786		-
Sale - capital leaseback of property impact to inventory	3	,098,921		-		-

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, 2012 and 2011, approximately \$11,000 and \$110,000, 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, 2012 and December 31, 2011, amounts payable under this agreement were approximately \$2,100 and \$5,000, respectively.

Warranty Reserve

The product and service revenue contracts we entered into 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. Factors that affect our warranty liability include the number of installed units, estimated material costs, estimated travel, and labor costs. During the year ended December 31, 2012, and December 31, 2011, we adjusted our reserve for additional warranty claims arising from GenDrive component quality issues that were identified during the year. These are isolated quality issues that were identified in GenDrive units that are currently being used at customer sites. These units will be retro-fitted with replacement components that will improve the reliability of our GenDrive products for our customers.

The following table summarizes product warranty activity recorded during the year ended December 31, 2012 and 2011:

	December 31, 2012			December 31, 2011		
Beginning balance - January 1	\$	1,210,909	\$	862,480		
Additions for current year deliveries		996,439		825,421		
Reductions for payments made		(2,809,263)		(1,038,748)		
Reserve Adjustment	ī	3,273,324		561,756		
Ending balance - December 31	\$	2,671,409	\$	1,210,909		

Leases

trucks that expire over the next five years. Minimum rent payments under operating leases are recognized on a straight-line basis over the term of the lease.

On October 1, 2012, the Company entered into a Power Purchase Agreement (PPA) under which it is providing a customer with 255 GenDrive units, service and maintenance of the units and daily delivery of hydrogen in exchange for a monthly utility payment tied to the amount of energy (kilograms of hydrogen) consumed each month. The PPA has an initial term of three years with an automatic three year renewal unless the customer terminates at the end of the initial 3 year term. The minimum lease payments to be received in 2013, 2014, and 2015 are \$1,222,023, \$1,324,488 and \$993,366, respectively.

On December 28, 2012, Plug Power sold the 255 GenDrive units in use under the PPA to a third party and leased back the equipment for a period of 6 years to use to fulfill its obligations under the PPA or at other customer sites as agreed to by the owner/lessor. The transaction has been recorded by the Company as leased property under capital lease with a corresponding liability of obligations under capital lease on the consolidated balance sheets. As of December 31, 2012, assets relating to this agreement were \$2,969,799, recorded as leased property under capital lease, and liabilities relating to this agreement were \$1,955,128 recorded as obligations under capital lease on the consolidated balance sheets.

Future minimum lease payments under non-cancelable operating leases (with initial or remaining lease terms in excess of one year) and future minimum capital lease payments as of December 31, 2012 are:

Year ending December 31,	Ca	apital leases	Operating leases		
2013	\$	815,184	\$	658,470	
2014		815,184		463,652	
2015		611,388		452,735	
2016		-		451,011	
2017 and thereafter		<u>-</u> _		1,407,019	
Total future minimum lease payments	\$	2,241,756	\$	3,432,887	
Less amount representing interest (at 9.9%)		286,628			
Present value of net minimum capital lease payments		1,955,128			
Less current installments of obligations under capital leases		650,379			
Obligations under capital leases, excluding current installments	\$	1,304,749			

Rental expense and rental income for all operating leases for the years ended December 31, 2012, 2011 and 2010 were as follows:

	2012		2011		2011		2010	
Minimum rentals	\$	764,000	\$	887,000	\$	2,153,000		
Rental income		(236,900)		(161,000)		(269,000)		
	\$	527,100	\$	726,000	\$	1,884,000		

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, 2012, four customers comprise approximately 82.2% of the total accounts receivable balance, with each customer individually representing 63.1%, 7.7%, 6.3%, and 5.1% of total accounts receivable, respectively. 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.

For the year ended December 31, 2012, contracts with two customers comprised 43.1% of total consolidated revenues, with each customer individually representing 27.7%, and 15.4% of total consolidated revenues, 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.

The Company has cash deposits in excess of federally insured limits. The amount of such deposits is essentially all cash at December 31, 2012.

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.

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, which expires on March 19, 2019. 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.

Pursuant to an agreement negotiated between Linde LLC, (Linde), and the Company to supply hydrogen infrastructure and hydrogen to a customer under a Power Purchase Agreement, the Company has an obligation to purchase hydrogen, and pay a monthly service charge of \$10,000 for hydrogen infrastructure to Linde for the full term of the contract, which expires on July 31, 2022. Under the terms of this agreement, the Company also has an obligation for the maintenance of the hydrogen infrastructure for a monthly service charge of \$4,500.

18. 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.

19. Geographic Information

The following is a summary of revenue for the years ended December 31, 2012, 2011 and 2010, based on physical location of the subsidiary making the sale:

	2	012			2011				2010		
			_		Product and			Product and		<u> </u>	
	Product and service		search and velopment	ser	vice and licensed technology		Research and development		service and licensed technology		search and velopment
	revenue	cont	ract revenue		revenue	con	tract revenue	revenue		contract revenue	
United States	\$ 24,407,127	\$	1,701,330	\$	23,739,828	\$	3,886,114	\$	15,740,087	\$	3,463,508
Canada	-				-				134,692		134,362
Total	\$ 24,407,127	\$	1,701,330	\$	23,739,828	\$	3,886,114	\$	15,874,779	\$	3,597,870

Long-lived assets, representing the sum of net book value of property, plant, and equipment, net book value of leased property under capital leases, note receivable, and net book value of intangible assets, based on physical location as of December 31, 2012 and 2011, are as follows:

	2012	2011
United States	\$ 12,261,233	\$ 11,561,840
Canada	 3,258,071	 4,599,636
Total	\$ 15,519,304	\$ 16,161,476

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

	Quarters ended							
	March 31, June 30, 2012 2012		June 30,		September 30,		December 31,	
			2012		2012			
Product and service revenue	\$	7,237	\$	7,201	\$	4,273	\$	5,696
Research and development contract revenue		515		458		502		226
Licensed technonlogy revenue		-		-		-		-
Net loss		(6,583)		(6,480)		(10,325)		(8,474)
Loss per share:								
Basic and Diluted		(0.28)		(0.17)		(0.27)		(0.22)

	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)

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.

21. 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:

Equity Offerings and Related Matters

On February 12, 2013, the Company amended its Shareholder Rights Agreement dated as of June 23, 2009, as amended, to exempt any investor from purchasing shares of common stock, so long as such investor and its affiliates and associates do not at any time beneficially own shares of our common stock equaling or exceeding one-half of one percent more than the percentage of the then outstanding shares of common stock beneficially owned by such investor and its affiliates and associates. As a result, such ownership by any such investor will not trigger the exercisability of the preferred share purchase rights under the Shareholder Rights Agreement that would give each holder the right to receive upon exercise one tenthousandth of a share of our Series A Junior Participating Cumulative Preferred Stock.

On February 20, 2013, the Company completed an underwritten public offering of 18,910,000 shares of common stock and accompanying warrants to purchase 18,910,000 shares of common stock. The shares and warrants were sold together as a fixed combination, with each combination consisting of one share of common stock and one warrant to purchase one share of common stock, at a price to the public of \$0.15 per fixed combination for gross proceeds of approximately \$2.8 million. The warrants have an exercise price of \$0.15 per share, are immediately exercisable and will expire on February 20, 2018. Net proceeds, after underwriting discounts and commissions and other estimated fees and expenses payable by the Company, were approximately \$2.1 million. The Company intends to use the net proceeds of the offering for working capital and other general corporate purposes, including capital expenditures. In connection with the offering, the Company has granted the underwriters a 45-day option to purchase up to an additional 2,836,500 shares of common stock to cover over-allotments, if any.

On February 21, 2013, the Company sold 2,801,800 additional shares of common stock, pursuant to the underwriter's exercise of its overallotment option in connection with the public offering, resulting in additional net proceeds to the Company of approximately \$365,000.

On May 31, 2011, the Company granted 7,128,563 warrants as part of an underwritten public offering. As a result of the March 28 and 29, 2012 public offerings and pursuant to the effect of the anti-dilution provisions, the exercise price of the warrants was reduced to \$2.27 per share of common stock. Simultaneously with the adjustment to the exercise price, the number of common stock shares that may be purchased upon exercise of the warrants was increased to 9,421,008 shares. As a result of the February 20 and 21, 2013 public offerings and pursuant to the effect of the anti-dilution provisions, the exercise price of the warrants was reduced to \$1.13 per share of common stock. Simultaneously with the adjustment to the exercise price, the number of common stock shares that may be purchased upon exercise of the warrants was increased to 18,925,389 shares.

Building Sale-leaseback

On January 24, 2013, the Company entered into a Purchase and Sale Agreement with 968 Albany Shaker Road Associates, LLC (the Buyer). The Purchase and Sale Agreement provides, among other things, that the Company will sell to the Buyer its property (building and land) located at 968 Albany Shaker Road, Latham, New York consisting of approximately 34.45 acres for an aggregate purchase price of \$4,500,000 and that the Company and the Buyer will form a new limited liability company. The new limited liability company will provide the Company with monthly distributions.

In connection with the Purchase and Sale Agreement, the Company also entered into a Lease Agreement on January 24, 2013 with the Buyer, pursuant to which the Company leases from the Buyer a portion of the premises sold pursuant to the Purchase and Sale Agreement for a term of 15 years.

On March 13, 2013, the Company entered into an Amendment to Purchase and Sale Agreement (the "Amendment") with the Buyer. Among other things, the Amendment decreases the amount payable to the Company at the closing of the Purchase and Sale Agreement, increases the value of the Company's membership interest in the new limited liability company, and increases the monthly distributions to be paid by the new limited liability company to the Company.

On March 27, 2013, the Company completed the sale and leaseback transaction of its property under the terms described above. Additionally, at the closing the Company issued two standby letters of credit to the benefit of the landlord/lessor that can be drawn by the beneficiary in the event of default on the lease by Plug Power. The standby letters total \$750,000 and are 100% collateralized by cash balances of the Company. This cash is restricted from use by the Company for any other purpose than to collateralize the standby letters. The standby letters are renewable for a period of ten years and can be cancelled in part or in full if certain covenants are met and maintained by the Company.

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, 2012				
Deducted from liability accounts:				
Product warranty reserve	1,210,909	4,269,763	2,809,263 (a)	2,671,409
December 31, 2011				
Deducted from liability accounts:				
Product warranty reserve	862,480	1,387,177	1,038,748 (a)	1,210,909

(a) Cost of warranty performed

Consent of Independent Registered Public Accounting Firm

The Board of Directors Plug Power Inc.:

We consent to the incorporation by reference in the registration statements on Form S-8 (Nos. 333-90275, 333-90277 and 333-72734), and Form S-3 (Nos. 333-173268, 333-109737 and 333-117358) of Plug Power Inc., of our report dated April 1, 2013, with respect to the consolidated balance sheets of Plug Power Inc. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012, and the related consolidated financial statement schedule, which report appears in the December 31, 2012 annual report on Form 10-K of Plug Power Inc.

Our report dated April 1, 2013 contains an explanatory paragraph that states that the Company has suffered recurring losses from operations and has experienced a substantial decline in working capital, which raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements and financial statement schedule do not include any adjustments that might result from the outcome of that uncertainty.

/s/ KPMG LLP

Albany, New York April 1, 2013

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

Date: April 1, 2013	by:	/s/ A ndrew M arsh
	•	Andrew Marsh
		Chief Evecutive Officer

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

Date: April 1, 2013	by:	/s/ G ERALD A. A NDERSON	
		Gerald A. Anderson	

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

In connection with the Annual Report of Plug Power Inc. (the "Company") on Form 10-K for the period ended December 31, 2012 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), I, Andrew Marsh, Chief Executive Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 ("§ 906"), that to my knowledge:

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

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

/s/ A NDREW M ARSH

Andrew Marsh Chief Executive Officer April 1, 2013

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

In connection with the Annual Report of Plug Power Inc. (the "Company") on Form 10-K for the period ended December 31, 2012 as filed with the Securities and Exchange Commission (the "SEC") on the date hereof (the "Report"), I, Gerald A. Anderson, Chief Financial Officer of the Company, certify, solely pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002 ("§ 906"), that to my knowledge:

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

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

/s/ G ERALD A. A NDERSON

Gerald A. Anderson Chief Financial Officer April 1, 2013