TECOGEN INC.
Form 10-K
March 31, 2014

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 10-K

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

For the fiscal year ended December 31, 2013
or

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

Commission file number 333-178697

TECOGEN INC.
(Exact name of Registrant as specified in its charter)

Delaware	04-3536131
(State or Other Jurisdiction of Incorporation or Organization)	(IRS Employer Identification No.)
45 First Avenue Waltham, Massachusetts	02451
(Address of Principal Executive Offices)	(Zip Code)

Registrant's Telephone Number, Including Area Code: (781) 622-1120
Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.001 par value	N/A

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every
Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post

such files).
Yes ý No ¨

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

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

Large accelerated filer o	Accelerated filer o
Non –accelerated filer o	Smaller reporting company x

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

The aggregate market value of the voting shares of the registrant held by non-affiliates is not applicable because our common stock was not yet trading as of June 28, 2013.

As of March 31, 2014, the registrant’s shares of common stock outstanding were: 15,156,600.

CAUTIONARY NOTE CONCERNING FORWARD-LOOKING STATEMENTS

THIS ANNUAL REPORT ON FORM 10-K CONTAINS FORWARD-LOOKING STATEMENTS WITHIN THE MEANING OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995 AND OTHER FEDERAL SECURITIES LAWS. THESE FORWARD-LOOKING STATEMENTS ARE BASED ON OUR PRESENT INTENT, BELIEFS OR EXPECTATIONS, AND ARE NOT GUARANTEED TO OCCUR AND MAY NOT OCCUR. ACTUAL RESULTS MAY DIFFER MATERIALLY FROM THOSE CONTAINED IN OR IMPLIED BY OUR FORWARD-LOOKING STATEMENTS AS A RESULT OF VARIOUS FACTORS.

WE GENERALLY IDENTIFY FORWARD-LOOKING STATEMENTS BY TERMINOLOGY SUCH AS “MAY,” “WILL,” “SHOULD,” “EXPECTS,” “PLANS,” “ANTICIPATES,” “COULD,” “INTENDS,” “TARGET,” “PROJECTS,” “CONTEMPLATES,” “BELIEVES,” “ESTIMATES,” “PREDICTS,” “POTENTIAL” OR “CONTINUE” OR THE NEGATIV
OF THESE TERMS OR OTHER SIMILAR WORDS. THESE STATEMENTS ARE ONLY PREDICTIONS. THE OUTCOME OF THE EVENTS DESCRIBED IN THESE FORWARD-LOOKING STATEMENTS IS SUBJECT TO KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS THAT MAY CAUSE OUR, OUR CUSTOMERS’ OR OUR INDUSTRY’S ACTUAL RESULTS, LEVELS OF ACTIVITY, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY THESE FORWARD-LOOKING STATEMENTS, TO DIFFER.

THIS REPORT ALSO CONTAINS MARKET DATA RELATED TO OUR BUSINESS AND INDUSTRY. THESE MARKET DATA INCLUDE PROJECTIONS THAT ARE BASED ON A NUMBER OF ASSUMPTIONS. IF THESE ASSUMPTIONS TURN OUT TO BE INCORRECT, ACTUAL RESULTS MAY DIFFER FROM THE PROJECTIONS BASED ON THESE ASSUMPTIONS. AS A RESULT, OUR MARKETS MAY NOT GROW AT THE RATES PROJECTED BY THESE DATA, OR AT ALL. THE FAILURE OF THESE MARKETS TO GROW AT THESE PROJECTED RATES MAY HAVE A MATERIAL ADVERSE EFFECT ON OUR BUSINESS, RESULTS OF OPERATIONS, FINANCIAL CONDITION AND THE MARKET PRICE OF OUR COMMON STOCK.

SEE “ITEM 1A. RISK FACTORS,” “MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS” AND “BUSINESS,” AS WELL AS OTHER SECTIONS IN THIS REPORT, THAT DISCUSS SOME OF THE FACTORS THAT COULD CONTRIBUTE TO THESE DIFFERENCES. THE FORWARD-LOOKING STATEMENTS MADE IN THIS ANNUAL REPORT ON FORM 10-K RELATE ONLY TO EVENTS AS OF THE DATE OF WHICH THE STATEMENTS ARE MADE. EXCEPT AS REQUIRED BY LAW, WE UNDERTAKE NO OBLIGATION TO UPDATE OR RELEASE ANY FORWARD-LOOKING STATEMENTS AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE.

TECOGEN INC.

ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2013
TABLE OF CONTENTS

PART I		
Item 1.	Business.	4
Item 1A.	Risk Factors.	25
Item 1B.	Unresolved Staff Comments.	35
Item 2.	Properties.	35
Item 3.	Legal Proceedings.	35
Item 4.	Mine Safety Disclosures.	35
PART II		
Item 5.	Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.	35
Item 6.	Selected Financial Data.	37
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations.	37
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk.	41
Item 8.	Financial Statements and Supplementary Data.	41
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.	41
Item 9A.	Controls and Procedures.	42
Item 9B.	Other Information.	43
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance.	43
Item 11.	Executive Compensation.	48
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.	53
Item 13.	Certain Relationships and Related Transactions, and Director Independence.	56
Item 14.	Principal Accountant Fees and Services.	61
PART IV		
Item 15.	Exhibits and Financial Statement Schedules.	61

Table of Contents
TECOGEN INC.

Item 1. Business

Overview

Tecogen designs, manufactures, sells, and services systems that produce electricity, hot water, and air conditioning for commercial installations and buildings and industrial processes. These systems, powered by natural gas engines, are efficient because they drive electric generators or compressors, which reduce the amount of electricity purchased from the utility, plus they use the engine's waste heat for water heating, space heating, and/or air conditioning at the customer's building. We call this cogeneration technology CHP for combined heat and power.

Tecogen manufactures three types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water; and
- High-efficiency water heaters.

All of these are standardized, modular, small-scale CHP products that reduce energy costs, carbon emissions, and dependence on the electric grid. Market drivers include the price of natural gas, local electricity costs, and governmental energy policies, as well as customers' desire to become more socially responsible. Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations; however, the economic feasibility of using our systems is not limited to these customer types. Through our factory-owned service centers in California, New York, Massachusetts, Connecticut, New Jersey, and Michigan our specialized technical staff maintain our products through long-term contracts. We have shipped approximately 2,000 units, some of which have been operating for almost 25 years. We have 67 full-time employees and 3 part-time employees, including 6 sales and marketing personnel and 39 service personnel.

Our CHP technology uses low-cost, mass-produced engines manufactured by GM and Ford, which we modify to run on natural gas. In the case of our mainstay cogeneration and chiller products, the engines have proved to be cost-effective and reliable. In 2009, our research team developed a low-cost process for removing air pollutants from the engine exhaust. Because these systems are fueled by natural gas, they typically produce lower levels of "criteria" air pollutants (those that are regulated by the EPA, because they can harm human health and the environment) compared with systems fueled by propane, gasoline, distillates, or residual fuel oil. We offer our new Ultra low-emissions technology as an option in our CHP systems.

After a successful field test of more than a year, in 2012 we introduced the technology commercially as an option for all of our products under the trade name Ultra, which was recently patented in the US in October 2013. The Ultra low-emissions technology repositions our engine-driven products in the marketplace, making them comparable environmentally with emerging technologies such as fuel cells, but at a much lower cost and greater efficiency.

Our products are designed as compact modular units that are intended to be applied in multiples when utilized for larger CHP plants. Approximately 68% of our CHP modules are installed in multi-unit sites ranging up to 12 units. This approach has significant advantages over utilizing single, larger units, such as building placement in constrained urban settings and redundancy during service outages. Redundancy is particularly relevant in regions where the electric utility has formulated tariff structures that have high "peak demand" charges. Such tariffs are common in many areas of the country, and are applied by such utilities as Southern California Edison, Pacific Gas and Electric, Consolidated Edison of New York, and National Grid of Massachusetts. Because these tariffs assess customers' peak

monthly demand charge over a very short interval (typically only 15 minutes), a brief service outage for a system comprised of a single unit is highly detrimental to the monthly savings of the system. For multiple unit sites, a full system outage is less likely and consequently these customers have a greater probability of capturing peak demand savings.

Our in-licensed microgrid technology enables our InVerde CHP products to provide backup power in the event of power outages that may be experienced by local, regional, or national grids.

Our CHP products are sold directly to customers by our in-house marketing team and by established sales agents and representatives, including American DG Energy and EuroSite Power which are affiliated companies. We have shipped approximately 2,000 units, some of which have been operating for almost 25 years. Our principal engine supplier is GM, and our principal generator supplier is Marathon Electric. To produce air conditioning, our engines drive a compressor purchased from J&E Hall International.

Table of Contents
TECOGEN INC.

In 2009, we created a subsidiary, Ilios, to develop and distribute a line of high-efficiency heating products, starting with a water heater. We believe that these products are much more efficient than conventional boilers in commercial buildings and industrial processes (see “Our Products” below). As of the date of this filing, we own a 63.7% interest in Ilios.

Tecogen was formed in the early 1960s as the Research and Development New Business Center of Thermo Electron Corporation, which is now Thermo Fisher Scientific Inc. For the next 20 years, this group performed fundamental and applied research in many energy-related fields to develop new technologies. During the late 1970s, new federal legislation enabled electricity customers to sell power back to their utility. Thermo Electron saw a fit between the technology and know-how it possessed and the market for cogeneration systems.

In 1982, the Research and Development group released its first major product, a 60-kilowatt, or kW, cogenerator. In the late 1980s and early 1990s, they introduced air-conditioning and refrigeration products using the same gas engine-driven technology, beginning with a 150-ton chiller (tons are a measure of air-conditioning capacity). In 1987, Tecogen was spun out as a separate entity by Thermo Electron and, in 1992, Tecogen became a division of the newly formed Thermo Power Corporation.

In 2000, Thermo Power Corporation was dissolved, and Tecogen was sold to private investors including Thermo Electron’s original founders, Dr. George N. Hatsopoulos and John N. Hatsopoulos. Tecogen Inc. was incorporated in the State of Delaware on September 15, 2000. Our business and registered office is located at 45 First Avenue, Waltham, Massachusetts, 02451. Our telephone number is 781-466-6400.

Industry Background

During the 20th century, fossil-fuel power plants worldwide evolved toward large, complex central stations using high-temperature steam turbines. This technology, though steadily refined, reached a maximum efficiency of about 40% that persists to this day. As used throughout, efficiency means electrical energy output per unit of fuel energy input. According to the EPA website, the average efficiency of fossil-fuel power plants in the United States is 33% and has remained virtually unchanged for four decades.

According to a 2002 report from the Northwest Power Planning Council, titled “Natural Gas Combined-cycle Gas Turbine Power Plants,” the best efficiency obtainable at the time of the report was about 50% from a combined-cycle steam turbine. More recent reports have expressed that comparable efficiency rates are obtainable from a fuel cell. A combined-cycle system incorporates a second turbine powered by exhaust gases from the first turbine. Large-scale replacement of existing power plants with combined-cycle technology would require considerable capital investment and time. Fuel cells have high capital costs as well.

CHP, which harnesses waste energy from the power generation process and puts it to work on-site, can boost the efficiency of energy conversion to nearly 90%, a better than two-fold improvement over the average efficiency fossil fuel plant.

The implications of the CHP approach are significant. If CHP were applied on a large scale, global fuel usage might be curtailed dramatically. Small on-site power systems, in sizes like boilers and furnaces, would serve customers ranging from homeowners to large industrial plants. This is described as “distributed” energy, in contrast to central power.

CHP became recognized in the late 1970s as a technology important to aiding the reduction of fossil fuel consumption, pollution, and grid congestion. Since then, CHP has been applied increasingly around the world.

According to a report by the International Energy Agency, or IEA, titled “Cogeneration and District Energy: Sustainable energy technologies for today...and tomorrow (2009), ” the value of CHP technology to customers and policy makers stems from the fact that CHP systems are “inherently energy efficient and produce energy where it is needed.”

According to the IEA report, the benefits of CHP include:

- Dramatically increased fuel efficiency;
- Reduced emissions of carbon dioxide (CO2) and other pollutants;
- Cost savings for the energy consumer;
- Reduced need for transmission and distribution networks; and
- Beneficial use of local energy resources, providing a transition to a low-carbon future.

Table of Contents
TECOGEN INC.

CHP generates about 10% of the world's electricity. According to the IEA report, CHP could supply up to 24% of the energy generation of the Group of Eight + Five countries, while meeting 40% of Europe's target reductions in carbon emissions.
In the United States, CHP represents only about 8% of the generating capacity. A paper issued by the United States Department of Energy, or DOE, in 2012, Combined Heat and Power, A Clean Energy Solution, states that CHP is an underutilized resource. On August 30, 2012, the White House issued an executive order, or the Executive Order, aimed at promoting investments in industrial energy efficiency, including CHP, and established a national goal of deploying 40 GW (or 40,000 megawatts, or MW) of new CHP in the United States by 2020.

On-site CHP not only eliminates the loss of electric power during transmission, but also offsets the capital expense of upgrading or expanding the utility infrastructure. The national electric grid is already challenged to keep up with existing power demand. The grid consists of power generation plants as well as the transmission and distribution network consisting of substations and wires.

Power plants are aging, and plans for new power plants are on the decline (Figure 1). According to the U.S. Energy Information Administration's " Form EIA-860 Annual Electric Generator Report (2010)," the average age of a U.S. coal-fired power plant is 44 years. Coal plants account for about 40% of the nation's generation capacity.

Figure 1 — Proposed U.S. New Capacity: Coal, Natural Gas, Wind, and Nuclear
Source: National Energy Technology Laboratory, Tracking New Coal Fired Power Plants (2012).

In addition, the transmission and distribution network is operating at capacity in urban areas. Decentralizing power generation by installing equipment at customer sites not only relieves the capacity burden on existing power plants, but also unburdens transmission and distribution lines. This ultimately improves the grid's reliability and reduces the need for costly upgrades. Consolidated Edison, Inc., the electric utility of New York City and surrounding areas, has identified an opportunity to integrate energy efficiency, distributed generation, and demand response as a way to defer new infrastructure investments, according to the utility's 2010 long-range plan.

Table of Contents
TECOGEN INC.

We believe that increasingly favorable economic conditions could improve our business prospects domestically and abroad. Specifically, we believe that natural gas prices might increase from their current depressed values, but only modestly, while electric rates could go up over the long-term as utilities pay for better emission controls, efficiency improvements, and the integration of renewable power sources. The net result of relative gas and electric prices could be greater cost savings and annual rates of return to CHP customers.

Moreover, we believe that natural gas could win favor politically as a domestic fuel with low carbon emissions. Government policy, both here and abroad, might promote CHP as a way to conserve natural resources and reduce carbon and toxic emissions. Renewable wind and solar sources could encounter practical limitations, while nuclear power is likely to be affected by its safety setbacks.

Tecogen's Strategy for Growth

Target markets and new customers

The traditional markets for CHP systems are buildings with long hours of operation and with coincident demand for electricity and heat. Traditional customers for our cogeneration systems include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations.

Traditional customers for our chillers overlap with those for our cogeneration systems. Chiller applications include schools, hospitals and nursing homes, office and apartment buildings, hotels, retailers, ice rinks and industrial facilities. Engine-driven chillers are utilized as replacements for aging electric chillers, since they both take up about the same amount of floor space.

The Company believes that the largest number of potential new customers in the U.S. require less than 1,000 kW of electric power and less than 1,200 tons of cooling capacity. We are targeting customers in states with high electricity rates in the commercial sector, such as California, Connecticut, Massachusetts, New Hampshire, New Jersey, and New York. These regions also have high peak demand rates, which favor utilization of our modular units in groups so as to assure redundancy and peak demand savings, as discussed above. Some of these regions also have generous rebates that improve the economic viability of our systems.

As stated earlier, the U.S. government's goal, according to the Executive Order, is to deploy 40 GW (40,000 MW) of new CHP in the United States by 2020. In order to estimate the share of that new deployment of CHP that is addressable by products in our size range, we reference a study done by ICF International on the California market that breaks down projected market penetration by kW output range. According to the April 2010 Combined Heat and Power Market Assessment, prepared for the California Energy Commission, in 2029, new CHP in the size range of our products (50 kW to 500 kW), is projected to be 476 MW in the base case, or 684 MW if incentives such as carbon credits and power export credits are considered. This size range constitutes 17.4% of the total California market potential in the base case, or 11% in the case with incentives. If we assume California's apportionment of small size CHP is applicable to the country, and conservatively extend the government's goal of 40,000 MW to 2029, we can estimate the U.S. market addressable by our products as 17.4% of 40,000 MW in the base case (11% with incentives) which amounts to 6,972 MW (4,416 MW with incentives). If we assume we can capture 30% of the market for CHP products in the size range of 50 kW to 500 kW, we can estimate that our potential for new unit sales over the next twenty years is between 13,250 and 20,920 InVerde (100 kW) units, or approximately $1.5 to $2.4 billion in revenue, at $112,500 per unit.

7

Table of Contents
TECOGEN INC.

The largest market sectors identified by ICF that are suitable for our products closely match our sales data from January 2007 through June 2012 (Figure 2).

Figure 2 — Tecogen Customer Distribution (CHP and Engine-Driven Chiller Systems)
From January 2007 through June 2012
Source: Tecogen Inc.

The ICF report reveals CHP's relatively low existing market penetration in the smaller system sizes. Given that multi-megawatt CHP is already well-established (Table 1), the market opportunity increases as size decreases. Small systems (less than one MW) may grow almost six-fold. The missed opportunity is evident and likely even more disproportionate nationally. Most areas of the country, except the Northeast, are essentially without significant market penetration of small-scale (less than 500 kW) CHP systems.

Table 1 — CHP Market Penetration by Size in California and Potential Through 2029
Source: ICF International, Combined Heat and Power Market Assessment (2010)

System Size (MW)	<1	1 - 4.9	5 – 19.9	>20
2009 Inventory (MW)	200	350	750	7,900
New Potential Through 2029 (MW)	1,138	1,279	764	3,015
Relative Growth Potential (%)	569 %	365 %	102 %	38 %

Table of Contents
TECOGEN INC.

The DOE/EPA report confirms that CHP is a "largely untapped resource" and states that there is significant technical market potential for CHP at commercial and institutional facilities at just over 65 GW. This report also indicates that there was a significant decline in CHP in the early 2000s due to deregulation of the power markets that resulted in market uncertainty and delayed energy investments. However, a significant rebound and expansion of the CHP market may occur because of the following emerging drivers:

- Changing outlook for natural gas supply and pricing as a result of shale exploration;
- Growing state policymaking and support; and
- Changing market conditions for the power and industrial sectors such as ageing power plants and boilers, as well as more strict air regulations.

We intend to seek both domestic and international customers in areas where utility pricing and government policy align with our advantages. These areas would include regions that have strict emissions regulations, such as California, or those that reward CHP systems that are especially non-polluting, such as New Jersey. There are currently 23 states that recognize CHP as part of their Renewable Portfolio Standards or Energy Efficiency Resource Standards and several of them, including New York, California, Massachusetts, New Jersey, and North Carolina, have initiated specific incentive programs for CHP (DOE/EPA report).

Our new microgrid capability, where multiple InVerde units can be seamlessly isolated from the main utility grid in the event of an outage and re-connected to it afterward, will likewise be exploited wherever utilities have resisted conventional generator interconnection but have conceded to UL-certified inverters (such as Consolidated Edison in New York and Pacific Gas and Electric Company in California). Because our InVerde systems operate independently from the grid, we also plan to exploit the need for outage security in certain market segments. These segments include military bases, hospitals, nursing homes, and hotels.

As noted above in "Industry Background," the IEA report estimates that power from CHP produced by the Group of Eight + Five countries, currently at 10%, could increase to 24% under a best-case scenario. We hope to participate in a robust international market, which we believe will be as large as or larger than the domestic market.

Alliances

We continue to forge alliances with utilities, government agencies, universities, research facilities, and manufacturers. We have already succeeded in developing new technologies and products with several entities, including:

- General Motors Company — supplier of raw materials pursuant to a supplier agreement since the development of our cogeneration product in the early 1960s.
- Sacramento Municipal Utility District — has provided test sites for the Company since 2010.
- Southern California Gas Company and San Diego Gas & Electric Company, each a Sempra Energy subsidiary — have granted us research and development contracts since 2004.
- Lawrence Berkeley National Laboratory — research and development contracts since 2005.
- Consortium for Electric Reliability Technology Solutions — research and development contracts and provided a test site to the Company since 2005.
- California Energy Commission — research and development contracts from 2004 until March 2013.
- The AVL California Technology Center — support role in performance of research and development contracts as well as internal research and development on our emission control system from August 2009 to November 2011.

We also have an exclusive licensing agreement from the Wisconsin Alumni Research Foundation (WARF) for its proprietary control software that enables our microgrid system. The software allows our products to be integrated as a

microgrid, where multiple InVerde units can be seamlessly isolated from the main utility grid in the event of an outage and re-connected to it afterward. The licensed software allows us to implement such a microgrid with minimal control devices and associated complexity and cost. Tecogen pays WARF a royalty for each cogeneration module sold using the licensed technology. Such royalty payments have been in the range of $5,000 to $20,000 on an annual basis through the year ended December 31, 2013. In addition, WARF reserved the right to grant non-profit research institutions and governmental agencies non-exclusive licenses to practice and use, for non-commercial research purposes technology developed by Tecogen that is based on the licensed software.

Table of Contents
TECOGEN INC.

Our efforts to forge partnerships continue to focus on utilities, particularly to promote the InVerde, our most utility-friendly product. The nature of these alliances varies by utility, but could include simplified interconnection, joint marketing, ownership options, peak demand mitigation agreements, and customer services. We have commissioned a microgrid with the Sacramento Municipal Utility District at its headquarters in Sacramento, California, where the central plant incorporated three InVerde systems equipped with our Ultra low-emissions technology. Some expenses for this project were reimbursed to the utility through a grant from the California Energy Commission.

Certain components of our InVerde product were developed through a grant from the California Energy Commission. This grant includes a requirement that we pay royalties on all sales of all products related to the grant. As of December 31, 2012, such royalties accrued in accordance with this grant agreement were less than $10,000 on an annual basis.

We also continue to leverage our resources with government and industry funding, which has yielded a number of successful developments. These include the Ultra low-emissions technology, sponsored by the California Energy Commission and Southern California Gas Company, and new 35-kW engine technology we developed with the California Energy Commission’s support.

Pursuant to the terms of the grants from the California Energy Commission, the California Energy Commission has a royalty-free, perpetual, non-exclusive license to these technologies, for government purposes.

For the years ended December 31, 2013 and 2012, we spent approximately $866,700 and $384,500, respectively, in research and development activities, of which $127,500 and $126,500, was reimbursed through a grant agreement, respectively.

Tecogen’s Solution

Our CHP products address the inherent efficiency limitation of central power plants by siting generation close to the loads being served. This allows customers with energy-intensive buildings or processes to reduce energy costs and operate with a lower carbon footprint. Furthermore, with technology we have introduced within the last two years, such as our Ultra low-emissions technology our products can now contribute to better air quality at the local level.

According to our estimates and public sources, our cogeneration systems convert nearly 90% of the natural gas fuel to useful energy in the form of electricity and hot water or space heat. This compares to about 40% for central power. Other on-site upgrades such as insulation or lighting can help cut energy use as well, but they do not displace nearly as much low-efficiency electricity. Our engine-driven chillers, when the waste heat is effectively used, offer similar efficiency benefits compared with running an electric chiller plus a furnace or boiler.

Cogeneration and chiller products can often reduce the customer’s operating costs (for the portion of the facility loads to which they are applied) by approximately 30% to 50% based on Company estimates, which provides an excellent rate of return on the equipment’s capital cost in many areas of the country with high electricity rates. Our chillers are especially suited to regions where utilities impose extra charges during times of peak usage, commonly called “demand” charges. In these cases, the gas-fueled chiller reduces the use of electricity during the summer, the most costly time of year.

Our water heater product, introduced by Ilios, operates like an electric heat pump but uses a natural gas engine instead of an electric motor to power the system (see “Our Products” for an explanation of the heat pump). The gas engine’s waste heat is recovered and used in the process, unlike its electric counterpart, which runs on power that has already

lost its waste heat. As of December 31, 2013 , we have shipped eight Ilios water heaters and have additional two in inventory to fulfill current orders.

The net effect is that our heat pump's efficiency far surpasses that of conventional boilers for water heating. Similarly, if used for space heating, the engine-powered heat pump would be more efficient than an electric heat pump, again because heat is recovered and used. The product's higher efficiency translates directly to lower fuel consumption and, for heavy use customers, significantly lower operating costs.

Our products also address the global objective of reducing greenhouse gas emissions. When burned to generate power, natural gas produces lower carbon emissions per unit of energy than any fossil fuel (Table 2), according to the EPA combined heat and power emissions calculator.

Table of Contents
TECOGEN INC.

Table 2 — Fossil Fuel Carbon Emissions
Source: EPA Emissions Calculator

Fuel	CO2 emissions, lbs/million Btu
Natural Gas	116.7
Distillate Oil	160.9
Coal	206.7

Our products, in addition to using the lowest amount of carbon fuel, further reduce CO2 emissions (greenhouse gases) because of CHP's higher efficiency. Figure 3 compares the CO2 output of our products to that of the national electric grid and other generation technologies. Our products are far superior to the grid and even outperform the CHP technologies of fuel cells and microturbines.

Figure 3 — Comparison of Carbon Emissions (GHG) for Various Sources
Including Tecogen's CHP and Chiller Products
Source: Tecogen Inc.

(1) Average U.S. Powerplant CO2 emission rate of 1,293 (lb/MWh) from USEPA eGrid 2010.
(2) Coal Combined Cycle emissions based upon 50% efficiency (assumed to be the same as Natural Gas) and coal CO2 emission rate from EPA website.
(3) "Best in Class" Natural Gas combined cycle plant emissions based upon 50% efficiency. (Northwest Power Planning Council "Natural Gas Combined-cycle Gas Turbine Power Plants, August 2002).
(4) Fuel Cell and Microturbine emissions based upon data listed in the ICF International Combined Heat and Power Market Assessment, April 2010.

Furthermore, one Tecogen 100-kW CHP unit will reduce carbon emissions by 390 tons per year (based on 8,000 run-hours), which, according to the EPA website's calculator, is the equivalent of 64 cars on the road. A microturbine of the same size would reduce carbon emissions by only 245 tons per year, the equivalent of 41 cars, which is less than two-thirds the emissions reduction of our CHP product. Our Ilios water heater also reduces CO2 emissions in proportion to its fuel savings.

Table of Contents
TECOGEN INC.

In addition to reducing greenhouse gases, our products with Ultra low-emission controls can improve air quality by reducing such pollutants as NOx and CO. Figure 4 presents the annual output of emissions of the InVerde unit equipped with the Ultra technology and compares it to alternative energy technologies producing the equivalent energy output on an annual basis (100 kW, 670,000 Btu/hr). Thus, for example, in lieu of an InVerde, a building would obtain electricity from a power plant and heat energy from a boiler. As Figure 4 shows, the Ultra CHP system's emissions are significantly less than the combined emissions of the power plant and boiler for the same energy output.

Figure 5 presents the criteria pollutant levels of the Ultra system versus alternative CHP sources of microturbines, fuel cells, and conventional reciprocating engines. Microturbines and fuel cells, newer CHP technologies typically considered low-emission alternatives to engines, produce more NOx than an Ultra engine CHP unit. Moreover, when compared to a conventional engine's "best available control technology" (BACT) as defined by the EPA for natural gas engines, both NOx and CO are reduced by nearly tenfold. Consequently, the Ultra low-emissions technology is potentially transformative to the engine's reputation in the energy marketplace, allowing it to now be characterized as a source of clean power.

Figure 4 — Comparison of Emissions Levels of Tecogen's Ultra Low-Emissions Technology to Conventional Energy Sources (Based on 6,000 hrs/year of operation at 100 kW and 670,000 Btu/hr)
Source: Tecogen Inc.

(1) Based upon an annual output of 100 kW and 670,000 Btu/hr of hot water.
(2) Average U.S. powerplant NOx emission rate of 1.7717 lb/MWh from (USEPA eGrid 2010), CO data not available.
(3) Gas boiler efficiency of 78% (www.eia.gov) with emissions of 20 ppm NOx @ 3% O2 (California Regulation SCAQMD Rule 1146.2) and 50 ppmvCO @ 3% O2 (California Regulation SCAQMD BACT).

Table of Contents
TECOGEN INC.

Figure 5 — Comparison of Tecogen Ultra Low-Emissions Technology to Other Technologies
Source: Tecogen Inc.

(1) Tecogen emissions based upon actual third party source test data.
(2) Microturbine and Fuel Cell NOx data from California Energy Commission, Combined Heat and Power Market Assessment 2010, by ICF international.
(3) Stationary engine BACT as defined by SCAQMD.
(4) Limits represent CARB 2007 emission standard for Distributed Generation with a 60% (HHV) Overall Efficiency credit.
(5) CO data not available for microturbine and fuel cell.

Our Products

We manufacture natural gas engine-driven cogeneration systems and chillers, all of which are CHP products that deliver more than one form of energy. We have simplified CHP technology for inexperienced customers. Our cogeneration products are all standard, modular units that come pre-packaged from the factory. They include everything the customer needs to minimize the cost and complexity of installing the equipment at a site. The package incorporates the engine, generator, heat-recovery equipment, system controls, electrical switchgear, emission controls, and modem for remote monitoring and data logging.

All of our cogeneration systems and most of our chillers use the same engine, the TecoDrive 7400 model supplied by GM and modified by us to use natural gas fuel. The small 25-ton chiller uses a similar GM engine, the 3000 model. We worked closely with GM and the gas industry (including the Gas Research Institute) in the 1980s and 1990s to modify the engine and validate its durability. For the Ilios water heater, we introduced a more modern Ford engine that is enhanced for industrial applications. As of December 31, 2013, we have shipped eight Ilios water heaters and have an additional two in inventory to fulfill current orders.

Our commercial product line includes:

- The InVerde® and TECOGEN® cogeneration units;
- TECOCHILL® chillers;
- Ilios high-efficiency water heaters; and
- Ultra low-emissions technology.

Table of Contents
TECOGEN INC.

InVerde Cogeneration Units

Our premier cogeneration product is the InVerde, a 100-kW CHP system that not only provides electricity and hot water, but also satisfies the growing customer demand for operation during a utility outage, commonly referred to as “black-start” capability. The InVerde incorporates an inverter, which converts direct current, or DC, electricity to alternating current, or AC. With an inverter, the engine and generator can run at variable speeds, which maximize efficiency at varying loads. The inverter then converts the generator’s variable output to the constant-frequency power required by customers (50 or 60 Hertz), as shown in Figure 6.

This inverter technology was developed originally for solar and wind power generation. The company believes that the InVerde is the first commercial engine-based CHP system to use an inverter. Electric utilities accept inverter technology as “safe” by virtue of its certification to the Underwriters Laboratory interconnection standard (1741) — a status that the InVerde has acquired. This qualifies our product for a much simpler permitting process nationwide and is mandatory in some areas such as New York City and California. The inverter also improves the CHP system’s efficiency at partial load, when less heat and power are needed by the customer.

The InVerde`s black-start feature addresses a crucial demand from commercial and institutional customers who are increasingly concerned about utility grid blackouts and brownouts, natural disasters, security threats, and antiquated utility infrastructure. Multiple InVerde units can operate collectively as a standalone microgrid, which is a group of interconnected loads served by one or more power sources. The InVerde is equipped with software that allows a cluster of units to seamlessly share the microgrid load without complex controls.

The InVerde CHP system was developed in 2007, and we began shipping it in 2008. Our largest InVerde installation utilizes 12 units, which supply 1.2 MW of on-site power and about 8.5 million Btu/hr of heat (700,000 Btu/hr per unit).

Figure 6 — Diagram of InVerde CHP System
Source: Tecogen Inc.

TECOGEN Cogeneration Units

The TECOGEN cogeneration system is the original model introduced in the 1980s, which is available in sizes of 60 kW and 75 kW, producing up to 500,000 Btu/hr of hot water. This technology is based on a conventional single-speed generator. It is meant only for grid-connected operation and is not universally accepted by utilities for interconnection, in contrast to the InVerde. Although this cogeneration product has the longest legacy and largest population, much of its production volume has been supplanted by the InVerde.

Table of Contents
TECOGEN INC.

TECOCHILL Chillers

Our TECOCHILL natural gas engine-driven chillers are available in capacities ranging from 25 to 400 tons, with the smaller units air-cooled and the larger ones water-cooled. This technology was developed in 1987. The engine drives a compressor that makes chilled water, while the engine's free waste heat can be recovered to satisfy the building's needs for hot water or heat. This process is sometimes referred to as "mechanical" cogeneration, as it generates no electrical power, and the equipment does not have to be connected to the utility grid.

A gas-fueled chiller provides enough air conditioning to avoid most of the utility's seasonal peak charges for electric usage and capacity. In summer when electric rates are at their highest, natural gas is "off-peak" and quite affordable. Gas-fueled chillers also free up the building's existing electrical capacity to use for other loads.

Ilios High-Efficiency Water Heaters

Our newest product, the Ilios high-efficiency water heater, uses a heat pump, which captures warmth from outdoor air even if it is moderately cool outside. Heat pumps work somewhat like a refrigerator, but in reverse. Refrigerators extract heat from inside the refrigerator and move it outside the refrigerator. Heat pumps extract heat from outside and move it indoors. In both cases, fluids move the heat around by flowing through heat exchangers. At various points the fluids are compressed or expanded, which absorbs or releases heat.

In the Ilios water heater, the heat pump moves heat from outdoors to the water being heated in the customer's building. The heat pump water heater serves as a boiler, producing hot water for drinking and washing or for space heating, swimming pools, or other building loads. Energy cost savings to the customer depend on the climate. Heat pumps in general (whether gas or electric) perform best in moderate weather conditions.

In a conventional electric heat pump, the compressor is driven by an electric motor. In the Ilios design, a natural gas-fueled engine drives the compressor. This means that the heat being captured from outdoors is supplemented by the engine's waste heat, which increases the efficiency of the process. According to scientific studies, gas engine heat pumps can deliver efficiencies in excess of 200%.

Ultra Low-Emissions Technology

All of our CHP products are available with the Ultra low-emissions technology. This breakthrough technology was developed in 2009 and 2010 as part of a research effort funded by the California Energy Commission and Southern California Gas Company. The objective was to bring our emission control systems into compliance with California's standards, which are the most stringent in the United States.

We were able to meet or exceed the standards with an emission control system that is cost-effective, robust, and reliable. The Ultra low-emissions technology keeps our CHP systems compliant with air quality regulations over the long term. Given the proprietary nature of this work, we obtained a patent in the United States and have filed patents that are pending in Europe, Australia, Brazil, Canada, China, Costa Rica, the Dominican Republic, India, Israel, Japan, Mexico, New Zealand, Nicaragua, Republic of Korea, Singapore, and South Africa. We shipped the first commercial CHP units equipped with Ultra low-emissions technology to a California utility in 2011.

Table of Contents
TECOGEN INC.

We conducted three validation programs for this technology:

1. Third-party laboratory verification. The AVL California Technology Center, a long-standing research and technology partner with the international automotive industry, confirmed our results in their state-of-the-art dynamometer test cell, which was outfitted with sophisticated emissions measurement equipment.
2. Verifying longevity and reliability in the field. We did so by equipping one of our TECOGEN 75-kW units, already operating at a customer location in Southern California, with the Ultra low-emissions technology and a device to monitor emissions continuously. To date, the Ultra low-emissions system has operated successfully for more than 25,000 hours (approximately 3 1/2 years) and has consistently complied with California's emission standards. This field test is ongoing.
3. Additional independent tests. During the field test, two companies licensed in California to test emissions each verified our results at different times. The results from one of these tests (obtained in August 2011) enabled us to qualify for New Jersey's fast-track permitting. Virtually every state nationwide requires some kind of permit related to local air quality, but New Jersey allows an exemption for systems such as ours that demonstrate superior emissions performance. This certification was granted in November 2011, and since then we have sold Ultra low-emissions systems to several customers.

In 2012, a 75 kW CHP unit equipped with the Ultra system became our first unit to obtain a conditional air permit (i.e. pending a third party source test to verify compliance) in Southern California since the strict regulations went into place in 2009. A state-certified source test, administered in January 2013, verified that our emissions levels were well below the new permitting requirements, and the final permit version was approved in August 2013. To date, we have shipped over fifty units fitted with the Ultra system to sites in the Northeast, as well as California.

Contributions to Revenue

The following table summarizes net revenue by product line and services for the years ended December 31, 2013 and 2012:

	December 31, 2013	December 31, 2012
Products:		
Cogeneration	$5,199,649	$5,791,412
Chiller	1,146,401	1,661,810
Total Product Revenue	6,346,050	7,453,222
Services	7,071,388	7,089,491
Installations	2,432,431	711,259
Total Service Revenue	9,503,819	7,800,750
Total Revenue	$15,849,869	$15,253,972

All of the Company's long lived assets reside in the United States of America. All of the Company's revenue is generated in the United States of America.

Segments

The Company's operations are comprised of one business segment. Our business is to manufacture and support highly efficient CHP products based on engines fueled by natural gas.

Product Reliability

Our product lines have a long history of reliable operation. Since 1995, we have had a remote monitoring system in place that connects to hundreds of units daily and reports their “availability,” which is the amount of time a unit is running or is ready to run (% of hours). Figure 7 shows cumulative data for an installed base of 340 units. More than 80% of them operate above 90% availability, with the average being 93.8%. By comparison, the average availability for all fossil-fueled power plants in the United States was 87.5% during 2006 – 2010, according to a report by the North American Electric Reliability Corporation.

Table of Contents
TECOGEN INC.

Figure 7 — Tecogen Product Reliability
Source: Tecogen Inc. – January 2014

Product Service

We provide long-term maintenance contracts, parts sales, and turnkey installation through a network of eight well-established field service centers in California, the Midwest, and the Northeast. These centers are staffed by full-time Tecogen technicians, working from local leased facilities. The facilities provide offices and warehouse space for inventory. We encourage our customers to provide Internet or phone connections to our units so that we can maintain communications, in which case we contact the machines daily, download their status, and provide regular operational reports (daily, monthly, and quarterly) to our service managers. This communication link is used to support the diagnosis effort of our service staff and to send messages to preprogrammed phones that a unit has experienced an unscheduled shutdown.

Our service managers, supervisors, and technicians work exclusively on our products. Because we manufacture our own equipment, our service technicians bring hands-on experience and competence to their jobs. They are trained at our manufacturing facility in Waltham, Massachusetts.

Most of our service revenue is in the form of annual service contracts, which are typically of an all-inclusive “bumper-to-bumper” type, with billing amounts proportional to achieved operating hours for the period. Customers are thus invoiced in level, predictable amounts without unforeseen add-ons for such items as unscheduled repairs or engine replacements. We strive to maintain these contracts for many years, so that the integrity and performance of the machine are maintained. Between 2007 and 2012, approximately 68% of customers signed service contracts.

R&D Capabilities

Our research and development tradition and ongoing programs have allowed us to cultivate deep engineering expertise and maintain continuity over several decades. We have strong core technical knowledge that is critical to product support and enhancements. Our TecoDrive engine, cogeneration and chiller products, InVerde, and most recently the InVerde Ultra and Ilios heat pump water heater were all created and optimized with both public and private funding support.

In March 2013, we successfully completed a $1 million program with the California Energy Commission, which was awarded in 2009, to develop a small CHP engine (about 35 kW) that uses advanced automotive technology. The engine achieves a nearly 20% fuel efficiency gain over our current TecoDrive technology. The program included an endurance test to qualify the engine for the CHP duty cycle. Final development work to transition to the 2012 model year advanced engine will occur in 2013 with rollout on the Ilios water heating product in late 2014. In 2015, we plan to develop a smaller InVerde unit (~35 kW) around this engine platform.

Table of Contents
TECOGEN INC.

In October 2012, Tecogen was awarded a contract for a demonstration project to retrofit a natural-gas powered municipal water pump engine with Tecogen's proprietary Ultra low-emissions technology. This project, co-sponsored by Southern California Gas Co. (SoCalGas), DE Solutions, and the Eastern Municipal Water District (EMWD) will be the first application of Tecogen's emission control technology on a non-Tecogen engine, and an important proof of concept for its wider application. This system was commissioned in September 2013.

Tecogen also continues to support a contract with the DOE's Lawrence Berkeley National Laboratory, awarded in 2012, for microgrid development work related to the InVerde.

Distribution Methods

Our products are sold directly to end-users by our sales team and by established sales agents and representatives. Various agreements are in place with distributors and outside sales representatives, who are compensated by commissions, including American DG Energy and EuroSite Power which are affiliated companies, for certain territories and product lines. For example, we have sales representatives for the chiller market in the New York City/New Jersey territory, but we do not have a sales representative for our cogeneration products in this territory. In New England, our affiliate, American DG Energy, has exclusive sales representation rights to our cogeneration products only (not including chillers). Sales through our in-house team or sales that are not covered by a representative's territory carry no commission or only a fractional one.

Summary of our Products' Advantages

- Our CHP products provide an efficient on-site solution to power generation as the market seeks cost savings and clean alternatives to centralized grid power.
- Our CHP products are all standard, modular units that come pre-packaged from the factory to simplify installation and grid connection. The systems are supported in the field by a nationwide network of experienced professional staff.
- Standardized CHP units, as opposed to custom-designed systems, achieve lower cost, better quality control, higher reliability, and easier service. Emission controls are integrated, and complete system warranty and maintenance are available.
- Our Ultra low-emissions technology eliminates the air quality concerns associated with engines. Our units comply with the most rigorous air quality regulations, including California's.
- Our cogeneration systems and chillers use standard, well-proven equipment made by reputable, well-established manufacturers. These components include rugged automotive engines, certified inverters, commercial generators, and conventional compressors. Certain key components are proprietary and have patent protection. Most notably, all control software is either proprietary (and copyright protected) or under an exclusive license agreement. Suppliers of the InVerde `s inverter and generator hold certain related patent protection.
- All of our CHP products can be designed for installation of multiple units at a single site, depending on the customer's particular needs. This enhances the ability of our products to meet the building's varying demand for electricity, heat, and/or air conditioning throughout the day and from season to season. Also, multiple units operate more efficiently throughout the range of a customer's high and low energy requirements.
- Our InVerde product is opening new market opportunities and expanding our reach to customers beyond our traditional market segments. The InVerde`s black-start feature addresses a crucial demand from customers concerned about utility blackouts and brownouts, natural disasters, security threats, and antiquated grid infrastructure. The InVerde also provides premium-quality power, which is required by operators of computer server farms and precision instrumentation, for example.
- The InVerde overcomes barriers related to grid interconnection, since the product is UL-certified as utility-safe. In microgrids, InVerde units can help prevent brownouts by maximizing their power output when utilities approach peak

capacity. Unlike standby diesel generators, the InVerde can operate without hourly limits because its emissions are so low, and it can serve as a stable anchor in hybrid microgrids that incorporate solar power.

- Our extensive use of standardized components lets us manufacture CHP products at competitive prices, even at relatively low production volumes. Proven, well-understood hardware increases the reliability and durability of the equipment and reduces the cost of servicing in the field. We are also able to minimize spare parts inventories and simplify training requirements.
- The Ilios heat pump water heater roughly doubles the efficiency of conventional water heating systems. The Ilios heat pump targets a large international market that is characterized by heavy, year-round use. This will increase fuel savings and maximize return on investment for the customer. Also, such applications are mostly central heating and cooling systems, rather than units distributed throughout the building, so it is easier to integrate new equipment. The heat pump water heater product competes only against other gas-fueled water heaters, which could expand our market beyond areas with high electric rates, and regulatory issues should be minimal.

Table of Contents
TECOGEN INC.

Competitive Position and Business Conditions

Our products fall into the broad market category of distributed generation systems that produce electric power on-site to mitigate the drawbacks of traditional central power and the low efficiency of conventional heating processes.

Renewable power sources, such as wind and solar, do not improve heating inefficiencies as CHP systems do, so they do not compete with our products. That is, CHP utilization is based on the redirection of fuel froman onsite boiler to an engine (or other device) for the production of electricity; the waste heat from the engine meets the heating load of the site with only a small incremental fuel consumption increase, but with the benefit of a significant amount of electricity production. As the boiler output cannot be displaced by renewable electricity production — the output of which is far more valuable displacing utility electric power, than used for water heating — the CHP opportunity remains available even in sites fully exploited relative to their renewable potential.

Cogeneration Systems

The ICF report breaks down the CHP market by technology as provided in Figure 8 below. We believe the California data applies to the domestic and international CHP market as a whole.

Figure 8 — Technology Size and Market Position
Source: ICF International, Combined Heat and Power Market Assessment (2010) (Data from 2004)

Our CHP products use automotive reciprocating engines originally designed for gasoline fuel and modified to run on natural gas. Diesel-fueled reciprocating engines will remain prominent in the CHP market, but only in larger, custom-designed systems (one MW or more), so these products do not compete with ours.

In smaller CHP sizes, competitors have duplicated our older design, coupling an automotive engine to a single-speed generator and adding controls and heat recovery. To be competitive with our designs, however, they would have to acquire comparable experience in the equipment and technology, installation contracting, maintenance and operation, economic evaluation of candidate sites, project financing, and energy sales, as well as the ability to cover broad regions. They would also have to meet the price of our products, which is low because we use standardized components.

We believe that no other company has developed a product that competes with our inverter-based InVerde, which offers UL-certified grid connection, outage capability, and variable-speed operation. We anticipate that an inverter-based product with at least some of these features will be introduced by others, but we believe that they will face serious challenges in duplicating the InVerde. Product development time and costs would be significant, and we expect that our patents and license for microgrid software will keep others from offering certain important functions.

Table of Contents
TECOGEN INC.

Our patent application relating to the Ultra low-emissions technology was issued by the U.S. PTO in October 2013. We expect that this will make the development of alternative technologies by competitors difficult. If this is the case, we could retain a strong competitive advantage for all our products in markets where severe emissions limits are imposed or where very clean power is favored, such as New Jersey, California, and Massachusetts.

Newer technologies, such as fuel cells and microturbines, pose limited competition to our CHP products. ICF International's 2010 CHP market assessment provides a comparison of the various small CHP technologies (50 – 500 kW), and a summary of this study is presented in Table 3. As shown, reciprocating engine CHP enjoys an economic advantage, as it has just over one-third the installed cost of a fuel cell and costs 20% less than a microturbine. With regard to operation and maintenance (O&M) costs, engine O&M costs are slightly less than those of microturbines, and just over half those of fuel cells. Although fuel cells have the highest electric efficiency (36%), they also have the lowest thermal output, so often fuel cells cannot recover enough heat to serve building loads effectively. Microturbines also recover less heat than engine CHP and have a lower electric efficiency. As a result, typical reciprocating engine CHP has the most favorable overall efficiency, at 79%, compared to 72% for microturbines and 67% for fuel cells.

With regard to pollutant emissions, Figure 5, above, compares all three technologies, along with the Tecogen engine CHP equipped with the Ultra technology. This figure illustrates that although fuel cells and microturbines are cleaner than conventional engine CHP (i.e., BACT), an engine equipped with Ultra technology now has comparable emissions to these other two technologies.

In the growing microgrid segment, neither fuel cells nor microturbines can respond to changing energy loads when the system is disconnected from the utility grid. Engines inherently have a fast dynamic response to step load changes, which is why they are the primary choice for emergency generators. Fuel cells and microturbines would require an additional energy storage device to be utilized in off-grid operation.

Most manufacturers of microturbines have refocused on other markets. We believe that Capstone Turbine Corporation is the only microturbine manufacturer with a commercial presence in CHP. Figure 9 reveals the modest impact of both microturbines and fuel cells in California's CHP space.

Table 3 — Comparison of CHP Technologies
Source: ICF International, Combined Heat and Power Market Assessment (2010)

	Microturbine 50 – 500 kW	Fuel Cell 50 – 500 kW	Generic Engine 100 kW
Installed Costs, $/kW	2,739	6,310	2,210
O&M Costs, $/kWh	0.022	0.038	0.020
Electric Efficiency, %	25.2%	36.0%	28.4%
Thermal Output, Btu/kWh	6,277	2,923	6,100
Overall Efficiency, %	72%	67%	79%

Table of Contents
TECOGEN INC.

Figure 9 — Share of Installed CHP by Prime Mover in California
Source: ICF International Combined Heat and Power Market Assessment (2010) — (Data from 2008)

Engine Driven Chillers (TECOCHILL)

According to the Energy Solutions Center (a non-profit consortium), three companies make gas-engine-driven chillers that compete with our products: Trane, a division of Ingersoll-Rand plc, York, a division of Johnson Controls, Inc. and Alturdyne. Natural gas can also fuel absorption chillers, which use fluids to transfer heat without an engine drive.

Today's low natural gas prices in the United States improve the economics of gas-fueled chillers, so more competition could emerge. However, engine chillers will continue to have an efficiency advantage over absorption machines. Chiller performance is measured in terms of cooling energy output per unit of fuel input. This industry standard is called the coefficient of performance, or COP. Absorption chillers achieve COPs of about 1.2 (see, for example, The Chartered Institution of Building Services Engineers' Datasheet 07, Absorption Cooling, February 2012). Our TECOCHILL products reach efficiencies well above that level (COPs ranging from 1.6 to 2.6).

Ilios Engine-Driven Heat Pump

Although a few companies manufacture gas-engine heat pumps, their products are not directly comparable to the Ilios. The Ilios water heater and other heat pump products compete in both the high-efficiency water heating market and the CHP market. In a typical building, the Ilios heat pump would be added on to an existing heating/water heating system, but would be operated as many hours as possible. The conventional boiler would be left in place, but would serve mainly as a backup when the heat pump's engine is down for maintenance or when the heat pump cannot meet the building's peak heating load.

The best customers for the Ilios heat pump water heater would be very similar to those for traditional CHP — heavy consumers of hot water and process heat. In areas where low electric rates make CHP not economical, the Ilios heat pump could be a financially attractive alternative because its economics depend only on natural gas rates. In some areas with high electric rates, the Ilios option could have advantages over CHP. For example, where it is hard to connect to the utility grid or where the building's need for electricity is too low for CHP to work economically. As of December 31, 2013, we have shipped eight Ilios water heaters and have an additional two in inventory to fulfill current orders.

Table of Contents
TECOGEN INC.

Intellectual Property

We currently hold three United States patents for our technologies:

- 8,578,704: “Assembly and method for reducing nitrogen oxides, carbon monoxide, and hydrocarbons in exhausts of internal combustion engines.” This patent, granted in November 2013, is for the Ultra emission system applicable to all our products.
- 7,239,034: “Engine driven power inverter system with cogeneration”. This patent, granted in July 2007, pertains to the utilization of an engine-driven CHP module combined with an inverter and applies to our InVerde product specifically.
- 7,243,017: “Method for controlling internal combustion engine emissions”. This patent, granted in July 2007, applies to the specific algorithms used in our engine controller for metering the fuel usage to obtain the correct combustion mixture. It applies to most of our engines.

In addition, we have licensed specific rights to microgrid algorithms developed by University of Wisconsin researchers for which we pay royalties to the assignee, The Wisconsin Alumni Research Foundation (WARF). The specific patent named in our agreement is “Control of small distributed energy resources” (7,116,010), granted in 2006. Our specific rights are valid for engine-driven systems utilizing natural gas or diesel fuel in the application of power generation where the per unit output is less than 500 kW.

We consider our patents and license to be important in the present operation of our business. The expiration, termination, or invalidity of one or more of these patents may have a material adverse effect on our business. Our earliest patent, that licensed from WARF, was issued in 2006 and expires in 2022. Most of our patents expire between 2022 and 2027.

We believe that no other company has developed a product that competes with our inverter-based InVerde. We anticipate that an inverter-based product with at least some of these features will be introduced by others, but we believe that competitors will face serious challenges in duplicating the InVerde. Product development time and costs would likely be significant, and we expect that our patent for the inverter-based CHP system (7,239,034) would offer significant protection, especially in key features. Likewise, we consider the microgrid license with WARF to be a key feature of our InVerde product, and one that would be difficult to duplicate outside the patent.

The recent issuance by the U.S. PTO of the patent for the Ultra low-emissions technology keeps that technology exclusive to us. It applies to all of our gas engine-driven products and may have licensing applications to other natural gas engines. We have also filed for patents for this technology in Europe, Australia, Brazil, Canada, China, Costa Rica, the Dominican Republic, India, Israel, Japan, Mexico, New Zealand, Nicaragua, Republic of Korea, Singapore, and South Africa. There is no assurance, however, that the Ultra low-emissions patent applications will be approved in any other country.

Government Regulation and Its Effect on Our Business

Several kinds of government regulations affect our current and future business, such as:

- Product safety certifications and interconnection requirements;
- Air pollution regulations, which govern the emissions allowed in engine exhaust;
- State and federal incentives for CHP technology; and
- Electric utility pricing and related regulations.

Regulations that control air quality and greenhouse gases might increasingly favor our low-emission products. Regulations related to utility rates and interconnection, which are burdensome today, could evolve to embrace CHP because of its efficiency benefits.

Product Safety Certifications and Interconnection Requirements

Our products must comply with various local building codes and must undergo inspection by local authorities. Our products are also certified by a third party to conform to specific standards. These certifications require continuous verification by a company that monitors our processes and design every three months. Our InVerde product is also certified to Europe's standard CE mark (European Conformity), which is mandatory for products imported into the European Union for commercial sale.

Table of Contents
TECOGEN INC.

Our cogeneration CHP products are also certified to a particular group of standards specific to the distributed power industry, which are used in the utility interconnection permitting process. These unique certifications were developed by various manufacturers, utilities, and government regulators to standardize the process of getting the utility's permission to jointly power a facility.

In essence, manufacturers of standard products are allowed to submit a sample unit to be "type-tested" by a Nationally Recognized Testing Laboratory. This test proves that the product adheres to safety requirements and that its design is fail-safe. The product then becomes eligible for a fast-track interconnection, after passing simple site-specific screens. Under state-mandated regulations, such as California Rule 21 and Massachusetts Interconnection Tariff 09-03, most utilities must accept the fast-track process, which includes the certification.

Simplified utility interconnection is important to CHP projects, so our interconnect certification, Underwriters Laboratory Standard 1741, or UL Certification, is a significant competitive advantage. Obtaining the UL Certification was a major reason for us to develop the inverter-based CHP product. As with our other product certifications, we plan to maintain the certification through routine processes when modest design changes occur. When complete recertification is required, such as when a new revision to the standard is applicable or when the design undergoes a major upgrade, the company will follow the normal procedures for first-time certification (third party design review and test verification). The company does not anticipate any changes to the standard that would preclude recertification, as the underlying content is carefully administered by balanced committees (representing utilities, inverter suppliers, and academia). In addition, the standard and its utilization as the criterion for systems to qualify for simplified interconnection programs, is important for the solar PV industry. The company believes that this importance to the solar industry will help assure the long-term relevance in interconnection of distributed generation devices.

Air Pollution Regulations

Stationary natural gas engines are subject to emissions regulations that are part of a complex hierarchy of state and federal regulations. The EPA establishes technology-specific standards that are based on cost-benefit analysis for emission control strategies. These standards, termed BACT (best available control technology), are imposed in regions that fail to meet federal clean air standards. Local regulators can and do restrict engine emissions to lower levels.

In some instances, regional standards in our key markets have become sufficiently strict, presenting a challenge in controlling pollution from natural gas engines. However, our development of the Ultra low-emissions technology has addressed this issue, allowing us to permit our equipment in the strictest region of Southern California. In January 2013, a state-certified source test at a new customer's site verified that our emissions levels were well below the new permitting requirements. Since we have now successfully removed this barrier, we are not only competitive in the California market, but have an advantage as a cleaner CHP technology. Likewise, in the Northeast where emissions regulations are trending towards California levels, we have already established our Ultra CHP as a certified technology in New Jersey, exempt from the air permitting process and subsequent testing, a unique status that separates us from the competition.

On the East Coast, important CHP territories are also moving toward limits below federal BACT levels. Effective in 2012, Massachusetts, Rhode Island, and Connecticut require 3.6 ppm NOx and about 56 ppm CO, which is on par with California's BACT standard. New Jersey also emulates California's BACT, but allows the project to side-step the air permit process if the CHP device is "emissions certified" through third-party testing to 10 ppm NOx and 10 ppm CO. Our Ultra low-emissions technology has qualified for New Jersey's "clean" certification, as noted earlier. In New York, clean power is encouraged through state grants that exclude products, or reduce the grant amount, unless low emissions are demonstrated.

Air emissions regulations also affect our air conditioning and Ilios heat pump products, though the effects are muted. TECOCHILL rebates are not common, and none has been tied to a specific emissions level. The heat pump's small size often exempts it from regulations, and the market for heat pump products could lie in lightly regulated regions (those with low electric rates). Nevertheless, the Ultra low-emissions technology can be applied to these products if required to meet regulatory standards.

State and Federal Incentives

On August 30, 2012, the White House released an Executive Order to accelerate investments in industrial energy efficiency, including CHP. The goal of the Executive Order is to supply 40 GW of energy by 2020 from greater efficiency sources such as CHP systems. The DOE, Commerce, and Agriculture, and the Environmental Protection Agency, or EPA, in coordination with the National Economic Council, the Domestic Policy Council, the Council on Environmental Quality, and the Office of Science and Technology Policy, shall coordinate policies to encourage investment in industrial efficiency in order to

Table of Contents
TECOGEN INC.

reduce costs for industrial users, improve U.S. competitiveness, create jobs, and reduce harmful air pollution. With this Executive Order, it is expected that barriers to CHP development will be removed with effective programs, policies, and financing opportunities, resulting in $40 – $80 billion in new capital investment in CHP. This initiative by the U.S. government may boost CHP awareness and stimulate market activity.

In addition, some states offer incentives to CHP systems. New York and New Jersey have incentive programs that rebate a significant portion of the CHP project cost. Similar incentive programs also exist in Massachusetts, Rhode Island, and Maryland albeit with different structures and terms. Massachusetts has an additional CHP incentive in the form of an annual rebate proportional to the carbon savings versus conventional technology.

Also our products installed before 2010 are eligible for the bonus depreciation included in the 2009 American Recovery and Reinvestment Act, and our products installed before January 1, 2014 are eligible for the bonus depreciation included in the 2012 American Taxpayer Relief Act. Also, the Energy Improvement and Extension Act of 2008 provides a 10% investment tax credit through 2016 for CHP in our size range, which applies to the total project cost. Our TECOCHILL and heat pump products also qualify for the credit when heat recovery achieves a minimum 60% efficiency.

Electric Utility Pricing and Related Regulations

Electricity prices, rate structures, and tariffs are another form of government incentive or disincentive. Utility pricing is administered through state agencies, typically public utility commissions, through formal proceedings involving the public, utilities, and various affected parties. Often, direct legislative mandates apply to specific issues. How these rules are structured and interpreted has a significant impact on the economic viability of CHP. These rules have hurt the CHP industry in the past, but we have designed our products to undermine their impact.

Demand Charges. Many electric utilities structure their commercial rates such that part of the customer's bill is fixed charges such as meter fees, and part is peak demand charges, which are a much larger line-item based on the building's maximum short-term usage (typically 15 minutes). Fixed charges, usually small, are not addressed by CHP technology. Avoidance of peak demand charges requires a CHP system to always operate at extremely high efficiency, which is difficult to achieve in practice.

Our CHP products, being small and modular, are often installed as multiple units. This protects the customer to some degree from incurring peak demand charges at the full system rating by providing equipment redundancy. The customer would then have to buy more electricity to make up for it, possibly incurring a large demand charge. With a modular, multi-unit CHP system, all the units would have to fail simultaneously to incur an equivalent charge.

Our TECOCHILLs are highly effective in eliminating not only summertime electricity usage, but also peak demand charges. The chiller's operation is confined to the cooling season, allowing maintenance to be scheduled for other times. Outages during the cooling season can be managed to minimize their impact.

Avoided-Cost Penalties. In some regions, utilities have argued that CHP customers, by reducing their electric usage, have avoided paying their fair share of the costs associated with grid infrastructure. To correct this perceived inequity, some utilities have successfully petitioned their state commissions to impose a "departing load charge." Utilities have also been allowed to add a "standby" surcharge to compensate for the cost of utility power being available when the CHP system is down.

These types of charges are not prevalent in East Coast states, but both standby and departing load charges are well-established in California. Although our CHP products are affected, our chillers and heat pumps are not.

Technology-Specific Net Metering. Interconnection issues are safety-related and should be product-neutral, but technology bias is common. In many states, CHP is excluded from net metering while other technologies are eligible. Under net metering, utilities must pay on-site generators for excess electricity that is fed into the grid. Net metering makes it easier to manage the operation of a CHP system or other generator.

Other Utility-Related Regulations. Another category of utility regulation that might affect our business is Renewable Portfolio Standards, or RPS. As of December 2012, some form of portfolio standards had been established in 38 states and the District of Columbia. According to the EPA, out of these states, 26 — Arizona, Connecticut, Delaware, Colorado, Hawaii, Illinois, Indiana, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington and West Virginia — specifically mention CHP and/or waste heat-to-power as eligible under their RPS (or related efficiency/clean energy

Table of Contents
TECOGEN INC.

program guidelines). RPS-type mechanisms have been adopted in several other countries, including Britain, Italy, Poland, Sweden, Belgium, and Chile.

Overall, RPS appears to be a positive policy for Tecogen and CHP. Program structures, if fair and balanced, encourage less fossil fuel use by offering financial incentives to improve efficiency. Electric power generated from renewable sources would tend to increase overall electric rates and improve CHP investment returns. Since these programs are in their early stages, their impact is yet to be determined.

A national carbon “cap and trade” program is not anticipated in the foreseeable future. Cap and trade programs seek to reduce carbon emissions by putting a price on them. Of possible impact to Tecogen is the cap and trade bill moving forward in the California legislature. The program’s details are still being reviewed and negotiated by various government and advocacy groups.

Employees

As of December 31, 2013, we employed 67 full-time employees and three part-time employees. We believe that our relationship with our employees is satisfactory. three of our New Jersey service employees are represented by a collective bargaining agreement which was executed on February 25, 2014 with a retroactive effective date of January 1, 2014.

Table of Contents
TECOGEN INC.

Item 1A. Risk Factors

Our business faces many risks. The risks described below may not be the only risks we face. Additional risks that we do not yet know of, or that we currently think are immaterial, may also impair our business operations or financial results. If any of the events or circumstances described in the following risks occurs, our business, financial condition or results of operations could suffer and the trading price of our common stock could decline. Investors and prospective investors should consider the following risks and the information contained under the heading "Cautionary Note Concerning Forward-Looking Statements" before deciding whether to invest in our securities.

Risks Relating to Our Business

Our operating history is characterized by net losses. We anticipate incurring further losses, and we may never become profitable.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We expect this trend to continue until such time that we can sell a sufficient number of systems and achieve a cost structure to become profitable. We may not have adequate cash resources to reach the point of profitability, and we may never become profitable. Even if we do achieve profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

We experience significant fluctuations in revenues from quarter to quarter due to a preponderance of one-time sales.

We have low volume, high dollar sales for projects that are generally non-recurring, and therefore our sales have fluctuated significantly from period to period. For example, when compared to the previous quarter, our revenues in 2010 decreased during the first, second and fourth quarters and increased during the third quarter. In 2011, our revenue decreased during the first and fourth quarters and increased during the second and third quarters. In 2012, our revenues increased during the first, second and fourth quarters and decreased during the third quarter. In 2013, our revenues increased in the first, third and fourth quarters and decreased in the second quarter. Fluctuations cannot be predicted because they are affected by the purchasing decisions and timing requirements of our customers, which are unpredictable.

We may be unable to fund our future operating requirements, which could force us to curtail our operations.

To the extent that our funds are insufficient to fund our future operating requirements, we would need to raise additional funds through further public or private equity or debt financings depending upon prevailing market conditions. These financings may not be available to us, or if available, may be on terms that are not favorable to us and could result in significant dilution to our stockholders and reduction of the trading price of our stock (if then publicly traded). The state of worldwide capital markets could also impede our ability to raise additional capital on favorable terms or at all. If adequate capital were not available to us, we likely would be required to significantly curtail our operations or possibly even cease our operations.

We believe that our existing resources, including cash and cash equivalents, future cash flows from operations and the expected net proceeds from the offering for which we filed a Registration Statement on Form S-1 on February 7, 2013, are sufficient to meet the working capital requirements of our existing business for the next twelve months. After that our cash requirements may increase.

If we experience a period of significant growth or expansion, it could place a substantial strain on our resources.

If our cogeneration and chiller products penetrate the market rapidly, we would be required to deliver even larger volumes of technically complex products or components to our customers on a timely basis and at a reasonable costs to us. We have never ramped up our manufacturing capabilities to meet large-scale production requirements. If we were to commit to deliver large volumes of products, we may not be able to satisfy these commitments on a timely and cost-effective basis.

The execution of our growth strategy is dependent upon the continued availability of third-party financing arrangements for our customers and is affected by general economic conditions.

The recent recession, current unstable economic conditions and limited availability of credit and liquidity could materially and adversely affect our business and results of operations because purchasers of our systems often require third party financing. Purchasers may be unable or unwilling to finance the cost to purchase our products or may be forced to cancel previously submitted orders or delay taking shipment until suitable credit is again available. Collecting payment from customers facing liquidity challenges is also difficult.

Table of Contents
TECOGEN INC.

We are dependent on a limited number of third-party suppliers for the supply of key components for our products.

We use third-party suppliers for components in many of our products. Our engine supplier is GM. Our generator supplier for our cogeneration products, other than the InVerde, is Marathon Electric. To produce air conditioning, our engines drive a compressor purchased from J&E Hall International. The loss of one of our suppliers could materially and adversely affect our business, if we are unable to replace them. While alternate suppliers for the manufacture of our engine, generator and compressor have been identified, should the need arise, there can be no assurance that alternate suppliers will be available and able to manufacture our engine, generator or compressor on acceptable terms.

From time to time, shipments can be delayed because of industry-wide or other shortages of necessary materials and components from third-party suppliers. A supplier's failure to supply components in a timely manner, or to 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 impair our ability to deliver our products in accordance with contractual obligations.

We expect significant competition for our products and services.

Competition for our products is currently limited (see “Competitive Position and Business Conditions” in the “Business” section of this Annual Report on Form 10-K). Many of our competitors and potential competitors are well established and have substantially greater financial, research and development, technical, manufacturing and marketing resources than we do. If these larger competitors decide to focus on the development of distributed power or cogeneration, they have the manufacturing, marketing and sales capabilities to complete research, development and commercialization of these products more quickly and effectively than we can. There can also be no assurance that current and future competitors will not develop new or enhanced technologies or more cost-effective systems, and therefore, there can be no assurance that we will be successful in this competitive environment.

The Executive Order to accelerate investments in industrial energy efficiency may lead to increased competition.

An Executive Order to accelerate investments in industrial energy efficiency, including CHP, was promulgated in August 2012. The goal of the Executive Order is to supply 40 gigawatts of energy by 2020 from greater efficiency sources such as CHP systems. With this Executive Order, it is expected that a number of barriers to CHP development will be removed with effective programs, policies, and financing opportunities resulting in significant new capital investment in CHP. This initiative by the U.S. government may lead to increased competition in the CHP market.

If we are unable to maintain our technological expertise in design and manufacturing processes, we will not be able to successfully compete.

We believe that our future success will depend upon our ability to continue to develop and provide innovative products and product enhancements that meet the increasingly sophisticated needs of our customers.

However, this requires that we successfully anticipate and respond to technological changes in design and manufacturing processes in a cost-effective and timely manner. The development of new, technologically advanced products and enhancements is a complex and uncertain process requiring high levels of innovation, as well as the accurate anticipation of technological and market trends. There can be no assurance that we will successfully identify new product opportunities, develop and bring new or enhanced products to market in a timely manner, successfully lower costs, and achieve market acceptance of our products, or that products and technologies developed by others will not render our products or technologies obsolete or noncompetitive.

The introduction of products embodying new technologies, and the shifting of customer demands or changing industry standards, could render our existing products obsolete and unmarketable. We may experience delays in releasing new products and product enhancements in the future. Material delays in introducing new products or product enhancements may cause customers to forego purchases of our products and purchase those of our competitors.

Table of Contents
TECOGEN INC.

Our intellectual property may not be adequately protected.

We seek to protect our intellectual property rights through patents, trademarks, copyrights, trade secret laws, confidentiality agreements, and licensing arrangements, but we cannot ensure that we will be able to adequately protect our technology from misappropriation or infringement. We cannot ensure that our existing intellectual property rights will not be invalidated, circumvented, challenged, or rendered unenforceable.

We have applied for and obtained patents on certain key components used in our products. Specifically, the Company holds three patents, all of which are utilized in our products. The first patent, from 2007, protects the incorporation of an inverter into an engine-driven CHP module and applies to our InVerde model. The second patent, also from 2007, pertains to algorithms used for combustion control in our engines. Our third patent, issued October 2013 in the United States, is for our Ultra low-emissions technology. This Ultra technology applies to all of our gas engine-driven products and may have licensing application to other natural gas engines. In addition, we have rights to a 2006 University of Wisconsin patent enabling us to use that patent's microgrid control algorithms for our specific use: engine-based power generation fueled by natural gas and diesel for engines less than 500 kW in electric power output.

We have also filed for patents for our Ultra low-emissions technology in Europe, Australia, Brazil, Canada, China, Costa Rica, the Dominican Republic, India, Israel, Japan, Mexico, New Zealand, Nicaragua, Republic of Korea, Singapore, and South Africa. As discussed under Recent Developments, the U.S. PTO has issued our patent. There is no assurance, however, that the Ultra low-emissions patent applications will be approved in any other countries.

Our competitors may successfully challenge the validity of our patents, design non-infringing products, or deliberately infringe our patents. There can be no assurance that other companies are not investigating or developing other similar technologies. In addition, our intellectual property rights may not provide a competitive advantage to us or ensure that our products and technology will be adequately covered by our patents and other intellectual property. Any of these factors or the expiration, termination, or invalidity of one or more of our patents may have a material adverse effect on our business.

Our control software is protected by copyright laws or under an exclusive license agreement. Further, we rely on treatment of our technology as trade secrets through confidentiality agreements, which our employees and vendors are required to sign. We also rely on non-disclosure agreements with others that have or may have access to confidential information to protect our trade secrets and proprietary knowledge. These agreements may be breached, and we may not have adequate remedies for any breach. Our trade secrets may also be or become known without breach of these agreements or may be independently developed by competitors. Failure to maintain the proprietary nature of our technology and information could harm our results of operations and financial condition.

Others may assert that our technology infringes their intellectual property rights.

We may be subject to infringement claims in the future. The defense of any claims of infringement made against us by third parties could involve significant legal costs and require our management to divert time from our business operations. If we are unsuccessful in defending any claims of infringement, we may be forced to obtain licenses or to pay additional royalties to continue to use our technology. We may not be able to obtain any necessary licenses on commercially reasonable terms or at all. If we fail to obtain necessary licenses or other rights, or if these licenses are costly, our operating results would suffer either from reductions in revenues through our inability to serve customers or from increases in costs to license third-party technologies.

Our success is dependent upon attracting and retaining highly qualified personnel and the loss of key personnel could significantly hurt our business.

To achieve success, we must attract and retain highly qualified technical, operational and executive employees. The loss of the services of key employees or an inability to attract, train and retain qualified and skilled employees, specifically engineering, operations, and business development personnel, could result in the loss of business or could otherwise negatively impact our ability to operate and grow our business successfully.

Our business is subject to product liability and warranty claims.

Our business exposes us to potential product liability claims, which are inherent in the manufacturing, marketing and sale of our products, and we may face substantial liability for damages resulting from the faulty design or manufacture of products or improper use of products by end users. We currently maintain a moderate level of product liability insurance, but there can be no assurance that this insurance will provide sufficient coverage in the event of a claim. Also, we cannot predict

Table of Contents
TECOGEN INC.

whether we will be able to maintain such coverage on acceptable terms, if at all, or that a product liability claim would not harm our business or financial condition. In addition, negative publicity in connection with the faulty design or manufacture of our products would adversely affect our ability to market and sell our products.

We sell our products with warranties. There can be no assurance that the provision in our financial statements for estimated product warranty expense will be sufficient. We cannot ensure that our efforts to reduce our risk through warranty disclaimers will effectively limit our liability. Any significant occurrence of warranty expense in excess of estimates could have a material adverse effect on our operating results, financial condition and cash flow. Further, we have at times undertaken programs to enhance the performance of units previously sold. These enhancements have at times been provided at no cost or below our cost. If we choose to offer such programs again in the future, such actions could result in significant costs.

Certain businesses and consumers might not consider cogeneration solutions as a means for obtaining their electricity and power needs.

Generating electricity and heat at the customers' building (on-site CHP) is an established technology, but it is more complex than buying electricity from the utility and using a furnace for heat. Customers have been slow to accept on-site CHP in part because of this complexity. In addition, the development of a larger market for our products will be impacted by many factors that are out of our control, including cost competitiveness, regulatory requirements, and the emergence of newer and potentially better technologies and products. If a larger market for cogeneration technology in general and our products in particular fails to grow substantially, we may be unable to continue our business.

We operate in a highly regulated business environment, and changes in regulation could impose significant costs on us or could make our products less economical, thereby affecting demand for our products.

Several kinds of government regulations – at federal, state, and local levels and in other countries – affect our current and future business (see "Government Regulation and Its Effect on Our Business" in the "Business" section of this Annual Report on Form 10-K). Our products must comply with various local building codes and must undergo inspection by local authorities. Our products are also certified by a third party to conform to specific standards. These certifications require continuous verification by a company that monitors our processes and design every three months. Our InVerde product is also certified to Europe's standard CE mark (European Conformity), which is mandatory for products imported into the European Union for commercial sale. If our products ceased to meet the criteria necessary for the applicable certifications, we may lose the ability to sell our products in certain jurisdictions, which may materially and adversely affect our business.

Regulatory agencies may further impose special requirements for the implementation and operation of our products that could significantly affect or even eliminate some of our target markets. We also may incur material costs or liabilities in complying with future government regulations. Furthermore, our potential utility customers must themselves comply with numerous laws and regulations, which may be complicated by further deregulation of the utility industry. We cannot determine how such deregulation may ultimately affect the market for our products. Changes in regulatory standards or policies could reduce the level of investment in the research and development of alternative power sources, including our products. Any reduction or termination of such programs could increase the cost to our potential customers, making our systems less desirable and thereby adversely affect our business and financial condition.

Utilities or governmental entities could hinder our entry into and growth in the marketplace, and we may not be able to effectively sell our products.

Utilities or governmental entities on occasion have placed barriers to the installation of our products or their interconnection with the electric grid, and they may continue to do so. Utilities may charge additional fees to customers who install on-site CHP and rely on the grid for back-up power. These types of restrictions, fees, or charges could make it harder for customers to install our products or use them effectively, as well as increasing the cost to our potential customers. This could make our systems less desirable, thereby adversely affecting our revenue and other operating results.

Table of Contents
TECOGEN INC.

We may not achieve production cost reductions necessary to competitively price our products, which would adversely affect our sales.

We believe that we will need to reduce the unit production cost of our products over time to maintain our ability to offer competitively priced products. Our ability to achieve cost reductions will depend on our ability to develop low-cost design enhancements, to obtain necessary tooling and favorable supplier contracts, and to increase sales volumes so we can achieve economies of scale. We cannot assure you that we will be able to achieve any such production cost reductions. Our failure to do so could have a material adverse effect on our business and results of operations.

We have granted sales representation rights to an affiliated company, which restricts our distribution.

Our affiliates American DG Energy and EuroSite Power Inc. have certain exclusive sales representation rights to our cogeneration products only (not including chillers) and exclusive rights to our Ultra low-emissions technology if it is applied to engines from other CHP manufacturers in projects developed by American DG Energy (see “The Company and Its Affiliates” in the “Business” section of this Annual Report on Form 10-K). As a result of these agreements, we have limited control over our distribution of certain products in New England, and this could have a material adverse effect on our business and results of operations.

Commodity market factors impact our costs and availability of materials.

Our products contain a number of commodity materials, from metals, which include steel, special high temperature alloys, copper, nickel and molybdenum, to computer components. The availability of these commodities could impact our ability to acquire the materials necessary to meet our requirements. The cost of metals has historically fluctuated. The pricing could impact the costs to manufacture our products. If we are not able to acquire commodity materials at prices and on terms satisfactory to us or at all, our operating results may be materially adversely affected.

Our products involve a lengthy sales cycle and we may not anticipate sales levels appropriately, which could impair our results of operations.

The sale of our products typically involves a significant commitment of capital by customers, with the attendant delays frequently associated with large capital expenditures. For these and other reasons, the sales cycle associated with our products is typically lengthy and subject to a number of significant risks over which we have little or no control. We expect to plan our production and inventory levels based on internal forecasts of customer demand, which is highly unpredictable and can fluctuate substantially. If sales in any period fall significantly below anticipated levels, our financial condition, results of operations and cash flow would suffer. If demand in any period increases well above anticipated levels, we may have difficulties in responding, incur greater costs to respond, or be unable to fulfill the demand in sufficient time to retain the order, which would negatively impact our operations. In addition, our operating expenses are based on anticipated sales levels, and a high percentage of our expenses are generally fixed in the short term. As a result of these factors, a small fluctuation in timing of sales can cause operating results to vary materially from period to period.

The economic viability of our projects depends on the price spread between fuel and electricity, and the variability of these prices creates a risk that our projects will not be economically viable and that potential customers will avoid such energy price risks.

The economic viability of our CHP products depends on the spread between natural gas fuel and electricity prices. Volatility in one component of the spread, such as the cost of natural gas and other fuels (e.g., propane or distillate oil), can be managed to some extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity may decline periodically due to excess generating capacity or general economic recessions.

Our products could become less competitive if electric rates were to fall substantially in the future. Also, potential customers may perceive the unpredictable swings in natural gas and electricity prices as an increased risk of investing in on-site CHP, and may decide not to purchase CHP products.

We are exposed to credit risks with respect to some of our customers.

To the extent our customers do not advance us sufficient funds to finance our costs during the execution phase of our contracts, we are exposed to the risk that they will be unable to accept delivery or that they will be unable to make payment at the time of delivery.

Table of Contents
TECOGEN INC.

We may make acquisitions that could harm our financial performance.

To expedite development of our corporate infrastructure, particularly with regard to equipment installation and service functions, we anticipate the future acquisition of complementary businesses. Risks associated with such acquisitions include the disruption of our existing operations, loss of key personnel in the acquired companies, dilution through the issuance of additional securities, assumptions of existing liabilities, and commitment to further operating expenses. If any or all of these problems actually occur, acquisitions could negatively impact our financial performance and future stock value.

Our ability to access capital for the repayment of debts and for future growth may be limited due to periods of fluctuating financial markets and periods of disruption and recession. We may be affected by unknown future market conditions.

Our ability to continue to access capital could be impacted by various factors including general market conditions and the continuing slowdown in the economy, interest rates, the perception of our potential future earnings and cash distributions, any unwillingness on the part of lenders to make loans to us, and any deterioration in the financial position of lenders that might make them unable to meet their obligations to us.

Our business is affected by general economic conditions and related uncertainties affecting the markets in which we operate. Potential future economic conditions including an unstable global economy could adversely impact our business in 2014 and beyond.

The current unstable economic conditions could adversely impact our business in 2014 and beyond, resulting in reduced demand for our products, increased rate of order cancellations or delays, increased risk of supplier bankruptcy, increased rate of supply order cancellation or delays, increased risk of excess and obsolete inventories, increased pressure on the prices for our products and services; and greater difficulty in collecting accounts receivable.

Risks Related to Ownership of our Common Stock

No public market for our Common Stock currently exists, and an active trading market for our Common Stock may not develop or be sustained.

There is no public market for our Common Stock. An active trading market for our shares may never develop or, if developed, be maintained following. If an active market for our Common Stock does not develop or is not maintained, it may be difficult for investors to sell shares of our Common Stock without depressing the market price for the shares or at all. An inactive trading market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration. We could issue additional Common Stock, which might dilute the book value of our Common Stock.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our Common Stock will depend on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will cover us, or provide favorable coverage. If one or more analysts downgrade our stock or change their opinion of our stock, our share price would likely decline. In addition, if one or more analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause

our share price or trading volume to decline.

Investment in our Common Stock is subject to price fluctuations and market volatility.

Historically, valuations of many small companies have been highly volatile. The securities of many small companies have experienced significant price and trading volume fluctuations, unrelated to the operating performance or the prospects of such companies. The market price of shares of our Common Stock could be subject to wide fluctuations in response to many risk factors listed in this section, and others beyond our control, including:

- results and timing of our product development;

- results of the development of our competitors' products;

Table of Contents
TECOGEN INC.

- regulatory actions with respect to our products or our competitors' products;
- actual or anticipated fluctuations in our financial condition and operating results;
- actual or anticipated changes in our growth rate relative to our competitors;
- actual or anticipated fluctuations in our competitors' operating results or changes in their growth rate;
- competition from existing products or new products that may emerge;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations, or capital commitments;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- additions or departures of key management or personnel;
- disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain, maintain, defend or enforce proprietary rights relating to our products and technologies;
- announcement or expectation of additional financing efforts;
- sales of our Common Stock by us, our insiders, or our other stockholders; and
- general economic and market conditions.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political, and market conditions such as recessions, interest rate changes, or international currency fluctuations, may negatively impact the market price of shares of our Common Stock. In addition, such fluctuations could subject us to securities class action litigation, which could result in substantial costs and divert our management's attention from other business concerns, which could potentially harm our business.

We could issue additional Common Stock, which might dilute the book value of our Common Stock.

Our board of directors has the authority, without action or vote of our stockholders, to issue all or a part of any authorized but unissued shares. Such stock issuances may be made at a price that reflects a discount from the then-current trading price of our Common Stock. We may issue securities that are convertible into or exercisable for a significant amount of our Common Stock. These issuances would dilute the percentage ownership interest of holders of our securities, which would have the effect of reducing their influence on matters on which our stockholders vote,

and might dilute the book value of our Common Stock. Investors in our securities may incur additional dilution of net tangible book value if holders of stock options, whether currently outstanding or subsequently granted, exercise their options or if warrant holders exercise their warrants to purchase shares of our Common Stock. There can be no assurance that any future offering will be consummated or, if consummated, will be at a share price equal or superior to the price paid by our investors even if we meet our technological and marketing goals.

We may be subject to securities litigation, which is expensive and could divert management attention.

Our share price may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to an increased incidence of securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Table of Contents
TECOGEN INC.

Our quarterly operating results are subject to fluctuations, and if we fail to meet the expectations of securities analysts or investors, our share price may decrease significantly.

Our annual and quarterly results may vary significantly depending on various factors, many of which are beyond our control. If our earnings do not meet the expectations of securities analysts or investors, the price of our stock could decline. Also, because our sales are primarily made on a purchase order basis, customers may generally cancel, reduce or postpone orders, resulting in reductions to our net sales and profitability.

Future sales of Common Stock by our existing stockholders may cause our stock price to fall.

The market price of our Common Stock could decline as a result of sales by our stockholders of shares of Common Stock in the market or the perception that these sales could occur. As a result, such sales could significantly impact the trading price of our Common Stock and the ability of other stockholders to sell shares of our Common Stock. These sales might also make it more difficult for us to sell equity securities at a time and price that we deem appropriate and thus inhibit our ability to raise additional capital when it is needed.

Because we do not intend to pay cash dividends, our stockholders will receive no current income from holding our stock.

We have paid no cash dividends on our capital stock to date and we currently intend to retain all of our future earnings, if any, to fund the development and growth of our business. In addition, the terms of any future debt or credit facility may preclude us from paying these dividends. As a result, capital appreciation, if any, of our Common Stock will be the sole source of gain for our stockholders for the foreseeable future.

We are controlled by a small group of majority stockholders, and our minority stockholders will be unable to effect changes in our governance structure or implement actions that require stockholder approval, such as a sale of the Company.

George N. Hatsopoulos and John N. Hatsopoulos, who are brothers, beneficially own approximately 48.0% of our outstanding shares of Common Stock. These stockholders have the ability to control various corporate decisions, including our direction and policies, the election of directors, the content of our charter and bylaws and the outcome of any other matter requiring stockholder approval, including a merger, consolidation and sale of substantially all of our assets or other change of control transaction. The concurrence of our minority stockholders will not be required for any of these decisions.This concentration of voting power could delay or prevent an acquisition of us on terms that other stockholders may desire. The interests of this group of stockholders may not always coincide with your interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their Common Stock, which might affect the prevailing market price for our Common Stock.

We are controlled by our two founding stockholders, George N. Hatsopoulos and John N. Hatsopoulos. These stockholders have registered the majority of their holdings for resale therefore are able to sell all of their Common Stock.

John N. Hatsopoulos and George N. Hatsopoulos have registered the majority of their holdings of our Common Stock for resale primarily for estate planning purposes. For that reason, the timing and the amount of any future sales by them is difficult to predict. George Hatsopoulos is a director but not an officer of the Company. John Hatsopoulos is the Chief Executive Officer and a key employee of the Company. If John Hatsopoulos or George Hatsopoulos were to

sell a substantial portion of their shares in the Company, they would no longer have a substantial continuing interest in the Company. If that were to occur, it may have a material adverse effect on their performance as director or Chief Executive Officer, as applicable, and on the business of the Company. Further, substantial sales of their Common Stock may result in a decline in the market price of our Common Stock.

There has been a material weakness in our disclosure controls and procedures and our internal control over financial reporting, which could harm our operating results or cause us to fail to meet our reporting obligations.

As of our fiscal year end, December 31, 2013, our principal executive officer and principal accounting officer performed an evaluation of controls and procedures and concluded that our controls were not effective to provide reasonable assurance that information required to be disclosed by our Company in reports that we file under the Exchange Act, is recorded, processed, summarized and reported as when required. Management conducted an evaluation of our internal control over financial reporting and based on this evaluation, management concluded that the company’s internal control over financial

Table of Contents
TECOGEN INC.

reporting was not effective as of December 31, 2013. The Company currently does not have personnel with a sufficient level of accounting knowledge, experience and training in the selection, application and implementation of generally acceptable accounting principles as it relates to complex transactions and financial reporting requirements. The Company also has a small number of employees dealing with general controls over information technology security and user access. This constitutes a material weakness in financial reporting. Any failure to implement effective internal controls could harm our operating results or cause us to fail to meet our reporting obligations. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock, and may require us to incur additional costs to improve our internal control system.

Trading of our Common Stock may be restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell our stock.

The SEC has adopted regulations that generally define "penny stock" to be any equity security that has a market price less than $5.00 per share or an exercise price of less than $5.00 per share, subject to certain exceptions. Our securities may be covered by the penny stock rules, which impose additional sales practice requirements on broker-dealers who sell to persons other than established customers and accredited investors. The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document in a form prepared by the SEC that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and other quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction and monthly account statement showing the market value of each penny stock held in the customer's account. The bid and offer quotations, and the broker-dealer and salesperson compensation information, must be given to the customer orally or in writing prior to effecting the transaction and must be given to the customer in writing before or with the customer's confirmation. In addition, the penny stock rules require that prior to a transaction in a penny stock not otherwise exempt from these rules, the broker-dealer must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. These disclosure and suitability requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that is subject to these penny stock rules. Consequently, these penny stock rules may affect the ability of broker-dealers to trade our securities. We believe that the penny stock rules may discourage investor interest in and limit the marketability of our capital stock. Trading of our capital stock may be restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell our stock.

The JOBS Act allows us to postpone the date by which we must comply with certain laws and regulations and reduces the amount of information provided by us in reports filed with the SEC. We cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Common Stock less attractive to investors.

We are and we will remain an "emerging growth company", as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, until the earliest to occur of (i) the last day of the fiscal year during which our total annual gross revenues equal or exceed $1 billion (subject to adjustment for inflation), (ii) the last day of the fiscal year following the fifth anniversary of our initial public offering, (iii) the date on which we have, during the previous three-year period, issued more than $1 billion in non-convertible debt, or (iv) the date on which we are deemed a large accelerated filer under the Exchange Act.

For so long as we remain an emerging growth company we are not required to:

- have an auditor report on our internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act;

comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (i.e., an auditor discussion and analysis);
- submit certain executive compensation matters to shareholder non-binding advisory votes;
- submit for shareholder approval golden parachute payments not previously approved; and
- disclose certain executive compensation related items such as the correlation between executive compensation and financial performance and comparisons of the Chief Executive Officer's compensation to median employee compensation, when such disclosure requirements are adopted.

Table of Contents
TECOGEN INC.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. An emerging growth company can therefore delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. However, we have chosen to "opt out" of such extended transition period, and as a result, we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

We cannot predict if investors will find our Common Stock less attractive because we may rely on some of these exemptions. If some investors find our Common Stock less attractive as a result, there may be a less active trading market for our Common Stock and our stock price may be more volatile. If we avail ourselves of certain exemptions from various reporting requirements, our reduced disclosure may make it more difficult for investors and securities analysts to evaluate us and may result in less investor confidence.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our headquarters is located in Waltham, Massachusetts, and consists of approximately 43,000 square feet of leased space, of which Tecogen occupies approximately 27,000 square feet of manufacturing, storage and office space. We sub-lease the remaining space to Ilios, American DG Energy, and other tenants. Our lease, with an original expiration date of March 31, 2014, was renewed for an additional ten years and will expire March 31, 2024. We believe that our facilities are appropriate and adequate for our current needs.

Item 3. Legal Proceedings.

From time to time, we may become party to litigation or other legal proceedings that we consider to be a part of the ordinary course of our business. We are not currently involved in legal proceedings that could reasonably be expected to have a material adverse effect on our business, prospects, financial condition, or results of operations. We may become involved in material legal proceedings in the future.

Item 4. Mine Safety Disclosures.

Not applicable.

Table of Contents
TECOGEN INC.

PART II

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

Market

Our common stock is not currently traded on any stock exchange or electronic quotation system.

Holders

As of March 31, 2014 there were 250 holders of record of our Common Stock including 11 beneficial holders.

Dividends

To date, we have not declared or paid any dividends on our outstanding shares. We currently do not anticipate paying any cash dividends in the foreseeable future on our Common Stock. Although we intend to retain our earnings to finance our operations and future growth, our Board of Directors will have discretion to declare and pay dividends in the future. Payment of dividends in the future will depend upon our earnings, capital requirements and other factors, which our Board of Directors may deem relevant.

Equity Compensation Plans

For disclosure of securities authorized for issuance under equity compensation plans please see "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters".

Recent Sales of Unregistered Securities

Set forth below is information regarding Common Stock issued, warrants issued and stock options granted by the Company during 2013. Also included is the consideration, if any, we received and information relating to the section of the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

Common Stock and Warrants

From October 16, 2013 to January 17, 2014, the Company raised $6,651,844 in a private placement of 1,478,189 shares of Common Stock at a price of $4.50 per share. The private placement was exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

Included in the private placement described above, on October 16, 2013, the Company entered into a common stock purchase agreement with Bruno Meier, pursuant to which the Company sold, and Mr. Meier purchased, an aggregate of 66,667 shares of Common Stock for an aggregate purchase price of $300,000. Mr. Meier serves as a director of EuroSite Power Inc., which is an affiliate of the Company.

In connection with the private placement described above, Scarsdale Equities LLC, or Scarsdale, served as placement agent and received a commission of 6.75 percent on the sale of 910,461 shares of Common Stock sold to certain investors identified by Scarsdale in the private placement for an aggregate commission of $276,553.

Also included in the private placement above, on December 23, 2013, the Company entered into a common stock purchase agreement with Michaelson Capital Special Finance Fund LP, or Michaelson, pursuant to which the Company sold an aggregate of 444,445 shares of Common Stock to Michaelson for an aggregate purchase price of $2,000,000.

In connection with the private placement of Common Stock sold to Michaelson, Ardour Capital Investments, LLC, or Ardour, served as placement agent and received a commission of 6.75 percent for an aggregate commission of $135,000. In addition, Ardour served as placement agent in connection with the Senior Convertible Promissory Note issued to Michaelson and received a commission of $120,000.

Table of Contents
TECOGEN INC.

On December 23, 2013, the Company entered into a Senior Convertible Promissory Note with Michaelson for the principal sum of $3,000,000 with interest at 4.0% per annum for a term of three years. At Michaelson's option, the Senior Convertible Promissory Note, or a portion thereof, may be converted into shares of the Common Stock at a conversion price of $5.40 per share, subject to adjustment. Such transaction was exempt from registration under Section 4(a)(2) of the Securities Act and/or under Rule 506 of Regulation D.

Stock Options

On June 3, 2013, the Company granted nonqualified options to purchase 37,500 shares of Common Stock to one employee at $3.20 per share. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

On December 31, 2013, the Company granted nonqualified options to purchase 39,000 shares of the Common Stock to 26 employees and 1 director at $4.50 per share. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

Item 6. Selected Financial Data.

Not applicable.

Table of Contents
TECOGEN INC.

Item 7. Management's Discussion and Analysis of Financial Condition

You should read the following discussion and analysis of our financial condition and results of operations together with our financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review “Item 1A. Risk Factors” of this Annual Report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

Tecogen designs, manufactures and sells industrial and commercial cogeneration systems that produce combinations of electricity, hot water, and air conditioning using automotive engines that have been specially adapted to run on natural gas. Cogeneration systems are efficient because in addition to supplying mechanical energy to power electric generators or compressors – displacing utility supplied electricity – they provide an opportunity for the facility to incorporate the engine’s waste heat into onsite processes such as space and potable water heating. We produce standardized, modular, small-scale products, with a limited number of product configurations that are adaptable to multiple applications. We refer to these combined heat and power products as CHP (electricity plus heat) and MCHP (mechanical power plus heat).

Our products are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. We have agreements in place with distributors and sales representatives, including American DG Energy and EuroSite Power which are affiliated companies. Our existing customers include hospitals and nursing homes, colleges and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, and military installations. We have an installed base of more than 2,100 units. Many of these have been operating for almost 25 years.

In 2009, we created a majority-owned subsidiary Ilios to develop and distribute a line of ultra-high-efficiency heating products, including a high efficiency water heater. These products provide twice the efficiency of conventional commercial and industrial boilers (based upon management estimates) utilizing advanced thermodynamic principles. As of the date of this report, we own a 65.0% interest in Ilios.

For each of our last five fiscal years and prior thereto, we have incurred annual operating losses. We expect this trend to continue until such time that we can sell a sufficient number of systems and achieve a cost structure to become profitable. We may not have adequate cash resources to reach the point of profitability, and we may never become profitable. Even if we do achieve profitability, we may be unable to increase our sales and sustain or increase our profitability in the future.

Although we may, from time to time, have one or a few customers who may represent more than 10% of our product revenue for a given year, we are not dependent on the recurrence of revenue from those customers. Our product revenue is such that customers may make a large purchase once and may not ever make a purchase again. Our equipment is built to last 20 or more years, therefore, our product revenue model is not dependent on recurring sales transactions from the same customer. Our service revenue, however, may lend itself to recurring revenue from particular customers; although we currently do not have any service revenue customers who make up more than 10% of our total revenues on an annual basis. American DG Energy has been considered a major customer in certain years, as disclosed in the accompanying financial statements; however, we do not consider our business “dependent” upon its recurrence.

For the last two fiscal years, more than half of our revenue was generated from long-term maintenance contracts, or service contracts, which provide us with a somewhat predictable revenue stream, especially during the summer months. We have a slight surge of activity from May through September as our “chiller season” is in full swing. Our service revenue has grown from year to year since 2005, with our New York City/New Jersey, New England and to some extent California territories experiencing the majority of the growth. This growth is consistent with the sale of new units into those territories. Our service margins are generally predictable as we service hundreds of long-term contracts with relatively low dollar, high volume sales. Fluctuations at the job level are to be expected however, due to the number of jobs, gross margin generally evens out in the aggregate.

Our product revenue is derived from the sale of the various cogeneration modules, such as the InVerde 100, the CM-75 and the CM-60, and the three chiller models, such as the smaller ST, the larger DT and the RT (roof-top) units. The sales cycle for each module varies widely, and can range from as short as a month to as long as a year or more. The length of the sales cycle is generally dependent on the size of the project and the number of decision makers in a customer’s facility.

Table of Contents
TECOGEN INC.

Furthermore, since our products and their installation are costly they are considered a major capital improvement and customers may be slow in making their buying decisions. Our products sales are high dollar value, low volume transactions. Therefore our product revenue can be difficult to predict and the expected margin varies.

Our cogeneration and chiller modules are built to order and revenue is recognized upon shipment. The lead time to build and deliver a unit depends on its customized configuration and is approximately 12 to 16 weeks from time of purchase order. As revenue is recognized upon shipment, our work-in-process is an important factor in understanding our financial condition in any given quarter.

Recent Accounting Pronouncements

For recent accounting pronouncements see “Note 2 – Summary of significant accounting policies” to our consolidated financial statements.

Critical Accounting Policies

For critical accounting policies see “Note 2 – Summary of significant accounting policies” to our consolidated financial statements.

Emerging Growth Company

Section 107 of the JOBS Act provides that an emerging growth company can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. However, we chose to “opt out” of any extended transition period, and as a result we will comply with new or revised accounting standards on the relevant dates on which adoption of such standards is required for non-emerging growth companies. Section 107 of the JOBS Act provides that our decision to opt out of the extended transition period for complying with new or revised accounting standards is irrevocable.

Results of Operations

Year Ended December 31, 2013 Compared to Year Ended December 31, 2012

Revenues

Revenues in 2013 were $15,849,869 compared to $15,253,972 in 2012, an increase of $595,897 or 3.9%. This increase is largely due to an increase in service revenue during the year as a result of increased installation revenue. Product revenues in 2013 were $6,346,050 compared to $7,453,222 in 2012, a decrease of $1,107,172 or 14.9%. This decrease from the year ended December 31, 2012 to 2013 resulted from a decrease in cogeneration sales of $591,763 and a decrease in chiller sales of $515,409. Our product mix, as well as product revenue, can vary significantly from period to period as our products are high dollar, low volume sales in which revenue is only recognized upon shipment. As a result, such fluctuation is expected.

Revenues derived from our service centers including installation activities, in 2013 were $9,503,819 compared to $7,800,750 for the same period in 2012, an increase of $1,703,069 or 21.8%. Our service operation grows along with sales of cogeneration and chiller systems since the majority of our product sales are accompanied by a service contract or time and materials agreements. As a result our “fleet” of units being serviced by our service department grows with product sales. In addition, our service department revenue has increased due to turnkey projects of $2,432,431 in 2013 compared to $711,259 in 2012.

Cost of Sales

Cost of sales in 2013 was $10,819,741 compared to $9,388,898 in 2012, an increase of $1,430,843 or 15.2%. Our gross profit margin was 31.7% in 2013 compared to 38.4% in 2012, a decrease of 6.7%. The decrease in gross profit margin is attributable to the margin on turnkey projects, that, although they provide us with unit sales and the subsequent service contracts, the projects themselves provide a lower gross profit than our traditional service business. In addition, this decrease is attributable to sales of certain Ilios units at below cost. These units are among the first sold, and were sold at a loss in order to provide demonstration units for our sales representatives.

Table of Contents
TECOGEN INC.

Contract Research and Development

Contract research and development income, which is classified as an offset to applicable expenses, for the years ended December 31, 2013 and 2012 was $127,500 and $126,500, respectively, a decrease of $1,000. The majority of this decrease is due to the completion of a research and development contract which ended on June 30, 2011.

Operating Expenses

Operating expenses increased in 2013 to $8,700,232 compared to $7,868,700 in 2012, an increase of $831,532 or 10.6%. This increase was due to increased investments in research and development of approximately $436,000 compared to those of 2012, costs of $258,512 associated with an aborted public offering in the third quarter of 2013, an increase in our selling efforts including attendance at trade shows and the related travel expenses of approximately $150,000 and salaries, and various other expenses.

Selling expenses increased in 2013 to $1,423,587 compared to $1,225,580 for the same period in 2012 due to increased headcount in our sales and marketing departments. In addition, during the year ended December 31, 2013 the Company invested approximately $200,000 in trade shows and a traveling “road show” where three of the Company's products were showcased on an enclosed trailer which traveled through our key territories on the east coast.

Loss from Operations

Loss from operations for the year ended December 31, 2013 was $3,670,104 compared to $2,003,626 for the same period in 2012. The increase in the loss of $1,666,478 was due to the increase in operating expenses and reduction in gross profit as discussed above.

Other Income (Expense), net

Other expense, net for the year ended December 31, 2013 was $137,107 compared to $22,811 for the same period in 2012. Other income (expense) includes interest income and other income of $3,958, net of interest expense on notes payable of $141,065 in 2013. For the same period in 2012, interest and other income was $48,397 and interest expense was $71,208. The decrease in interest income of $44,439 is the result of a decrease in short-term investments.The increase in interest expense of $69,857 was mainly due to demand notes and line of credit with an outstanding balance of $1,200,000.

Provision for Income Taxes

We did not record any benefit or provision for income taxes for the years ended December 31, 2013 and 2012, respectively. As of December 31, 2013 and 2012, the income tax benefits generated from our net losses have been fully reserved.

Noncontrolling Interest

The noncontrolling interest share in the losses of Ilios was $357,722 for the year ended December 31, 2013 compared to $389,480 for the same period in 2012, a decrease of $31,758 or 8.2%. The decrease was due to a reduction in payroll costs that Ilios incurred in 2013, associated with the departure of its Chief Operating Officer in May of 2013 and related forfeiture of stock compensation. Noncontrolling interest ownership percentage as of December 31, 2013 and 2012 was 35.0%.

Net loss

Net loss for the year ended December 31, 2013 was $3,449,489 compared to $1,636,957 for the same period in 2012. The increase in the loss of $1,812,532 was due to the increase in operating expenses and reduction in gross profit as discussed above.

Liquidity and Capital Resources

Consolidated working capital at December 31, 2013 was $5,565,789, compared to $4,078,704 at December 31, 2012, an increase of $1,487,085 or 36.5%. Included in working capital were cash and cash equivalents of $7,713,899 at December 31, 2013, compared to $1,572,785 in cash and cash equivalents and $181,859 in short-term investments at December 31, 2012.

Table of Contents
TECOGEN INC.

Cash used in operating activities for the years ended December 31, 2013 and 2012 was $3,384,019 and $3,152,782, respectively. Our accounts receivable balance increased to $3,740,885 at December 31, 2013 compared to $2,700,243 at December 31, 2012, an increase of $1,091,242 due to timing of billing, shipments and collections. Unbilled revenues also increased by $646,398 in connection with turnkey projects. Our inventory decreased to $3,343,793 as of December 31, 2013 compared to $3,356,622 as of December 31, 2012, a decrease of $62,229. Prepaid assets as of December 31, 2013 decreased to $340,013 compared to $402,846, a decrease of $62,833.

Accounts payable increased to $2,338,046 as of December 31, 2013 from $1,151,010 at December 31, 2012, an increase of $1,187,036. Accrued expenses increased to $1,139,554 as of December 31, 2013 compared to $807,922 as of December 31, 2012, an increase of $331,632. Interest payable, related party increased from $126,170 as of December 31, 2012 to $198,450 as of December 31, 2013, an increase of $83,560.

Our related party balance was a net receivable of $55,837 as of December 31, 2012 and a net payable of $119,667 as of December 31, 2013. This change of $175,504 is due to the remaining balance on the prepayment for future purchases, received from American DG Energy of $827,747 as on March 14, 2013.

During 2013 our cash flows from investing activities were $916,389 and included sales of short-term investments of $182,061, purchases of property and equipment of $202,700, expenditures related to intangible assets such as patents and product certifications of $397,950 and an acquisition of a product line from a key vendor of $497,800.

Our cash flows from financing activities were $10,441,522 for 2013, resulting from the proceeds of $5,966,805 from the sale of the Company's common stock in a private placement, and the issuance of convertible debt of $3,000,000 and the issuance of demand notes payable of $1,650,000.

At December 31, 2013, our commitments included various leases for office and warehouse facilities of $5,333,143 to be paid over several years through 2024. The source of funds to fulfill these commitments will be provided either from cash and short-term investment balances, operations or through debt or equity financing.

Based on our current operating plan, we believe existing resources, including cash and cash flows from operations, will be sufficient to meet our working capital requirements for the next twelve months. As we continue to grow our business, we expect that our cash requirements will increase. As a result, we may need to raise additional capital through a debt financing or an equity offering to meet our operating and capital needs for future growth.

Seasonality

We expect that the majority of our heating systems sales will be in the winter and the majority of our chilling systems sales will be in the summer. Our cogeneration and chiller system sales are not generally affected by the seasons, although customer goals will be to have chillers installed and running in the spring. Our service team does experience higher demand in the warmer months when cooling is required. These units are generally shut down in the winter and started up again in the spring. This “busy season” for the service team generally runs from May through the end of September.

Off Balance Sheet Arrangements

On July 22, 2013, the Company’s Chief Executive Officer personally pledged to support a bank credit facility of $1,055,000 to support bank guarantees issued on certain construction contracts. This credit facility expires on July 22, 2014.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable.

Item 8. Financial Statements and Supplementary Data.

The information required by this item is included in Item 15 of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Table of Contents
TECOGEN INC.

Item 9A. Controls and Procedures.

Management's Evaluation of Disclosure Controls and Procedures:

Our disclosure controls and procedures are designed to provide reasonable assurance that the control system's objectives will be met. Our management, including our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our disclosure controls and procedures as of December 31, 2013, or the Evaluation Date, have concluded that as of the Evaluation Date, our disclosure controls and procedures were not effective due to material weaknesses in financial reporting relating to lack of personnel with a sufficient level of accounting knowledge and a small number of employees dealing with general controls over information technology. At the present time, our management has decided that, considering the employees involved and the control procedures in place, there are risks associated with the above, but the potential benefits of adding additional employees to mitigate these weaknesses do not justify the expenses associated with such increases. Management will continue to evaluate the above weaknesses, and as the Company grows and resources become available, the Company plans to take the necessary steps in the future to remediate the weaknesses.

For these purposes, the term disclosure controls and procedures of an issuer means controls and other procedures of an issuer that are designed to ensure that information required to be disclosed by the issuer in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting:

The management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting in accordance with the Exchange Act. Management, including our Chief Executive Officer and Chief Financial Officer, conducted an evaluation of our internal control over financial reporting based on the framework and criteria established in Internal Control—Integrated Framework (1992), issued by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion of this evaluation. Based on this evaluation, management concluded that the Company's internal control over financial reporting was not effective as of December 31, 2013.

At December 31, 2013, the Company employed 67 active full-time employees and 3 part-time employees. The Company currently does not have personnel with a sufficient level of accounting knowledge, experience and training in the selection, application and implementation of generally accepted accounting principles as it relates to complex transactions and financial reporting requirements. The Company also has a small number of employees dealing with general controls over information technology security and user access. This constitutes a material weakness in financial reporting. At this time, management has decided that considering the employees involved and the control procedures in place, there are risks associated with the above, but the potential benefits of adding additional employees to mitigate these weaknesses, does not justify the expenses associated with such increases. Management will continue to evaluate the above weaknesses.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our Disclosure Controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A

control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

TECOGEN INC.

Item 9B. Other Information.

On March 26, 2014, the Company entered into a Revolving Line of Credit Agreement, or the 2014 Credit Agreement, with John N. Hatsopoulos, our Chief Executive Officer. Under the terms of the 2014 Credit Agreement, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of $3,500,000 from time to time, at the written request of the Company. Any amounts borrowed by the Company pursuant to the 2014 Credit Agreement will bear interest at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Repayment of the principal amount borrowed pursuant to the 2014 Credit Agreement will be due on March 25, 2015.

Table of Contents
TECOGEN INC.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Executive

The following table lists the current members of our board of directors, or Board of Directors, and our executive officers. The address for our directors and officers is c/o Tecogen Inc., 45 First Avenue, Waltham, Massachusetts 02451.

Name	Age	Position(s)
Angelina M. Galiteva (1)(2)	47	Chairperson of the Board and Director
John N. Hatsopoulos	79	Chief Executive Officer and Director
Robert A. Panora	59	Chief Operating Officer and President
Bonnie J. Brown	51	Chief Financial Officer, Treasurer and Secretary
George N. Hatsopoulos	87	Director
Dr. Ahmed F. Ghoniem (1)(2)(3)	62	Director
Charles T. Maxwell (1)(3)	82	Director
Joseph E. Aoun (2)(3)	60	Director

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

Angelina M. Galiteva, age 47, has been our Chairperson of the Board of Directors since 2005. She is founder and Chair of the Board for the Renewables 100 Policy Institute, a non-profit entity dedicated to the global advancements of renewable energy solutions since 2008. Ms. Galiteva is also Chairperson at the World Council for Renewable Energy (WCRE) which focuses on the development of legislative and policy initiatives to facilitate the introduction and growth of renewable energy technologies since 2003. Since 2011, Ms. Galiteva has served on the Board of Governors of the California Independent System Operator (CA ISO), providing direction and oversight for the California ISO which operates the California electricity grid. Also, Ms. Galiteva is a principal at New Energy Options, Inc., a company focusing on advancing the integration of sustainable energy solutions since 2006. Ms. Galiteva has also been a strategic consultant with Renewable Energy Policy and Strategy Consulting since 2004. Ms. Galiteva holds a Master’s degree in Environmental and Energy Law, a law degree from Pace University School of Law, and a bachelor’s degree from Sofia University in Bulgaria.

Our Board of Directors has determined that Ms. Galiteva’s prior experience in the energy field qualifies her to be a member of the Board of Directors in light of the Company’s business and structure.

John N. Hatsopoulos, age 79, has been the Chief Executive Officer of the Company since the organization of the Company in 2000. He has also been the Chief Executive Officer of American DG Energy Inc., (NYSE MKT: ADGE), a publicly traded company in the On-Site Utility business since 2000, and the Chairman of EuroSite Power Inc., a subsidiary of American DG Energy Inc. since 2009. Mr. Hatsopoulos is a co-founder of Thermo Electron Corporation, which is now Thermo Fisher Scientific (NYSE: TMO), and the retired President and Vice Chairman of the Board of Directors of that company. He is a member of the Board of Directors of Ilios Inc., GlenRose Instruments Inc., Agenus

Inc. (NASDAQ: AGEN), American CareSource Holdings, Inc. (NASDAQ: ANCI) and TEI Biosciences Inc., and is a former Member of the Corporation of Northeastern University. The Company, American DG Energy Inc., EuroSite Power Inc., and GlenRose Instruments Inc., are affiliated companies by virtue of common ownership. Mr. Hatsopoulos graduated from Athens College in Greece, and holds a bachelor's degree in history and mathematics from Northeastern University, as well as honorary doctorates in business administration from Boston College and Northeastern University.

Mr. Hatsopoulos is the Company's Chief Executive Officer and is also the Chief Executive Officer of American DG Energy and the Chairman of GlenRose Instruments. On average, Mr. Hatsopoulos spends approximately 50% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

Table of Contents
TECOGEN INC.

Our Board of Directors has determined that Mr. Hatsopoulos' prior experience as co-founder, president and Chief Financial Officer of Thermo Electron Corporation, where he demonstrated leadership capability and gained extensive expertise involving complex financial matters, and his extensive knowledge of complex financial and operational issues qualify him to be a member of the Board of Directors in light of the Company's business and structure.

Robert A. Panora, age 59, has been our Chief Operating Officer and President since the organization of the Company in 2000 and the Chief Operating Officer of Ilios since its inception in 2009. He had been General Manager of Tecogen's Product Group since 1990 and Manager of Product Development, Engineering Manager, and Operations Manager of the Company since 1984. Over his 27-year tenure with Tecogen, Mr. Panora has been responsible for sales and marketing, engineering, service, and manufacturing. Mr. Panora contributed to the development of Tecogen's first product, the CM-60 cogeneration system, and was Program Manager for the cogeneration and chiller projects that followed. Mr. Panora has had considerable influence on many aspects of Tecogen's business, from building the employee team, to conceptualizing product designs and authoring many of the original business documents, sales tools, and product literature pieces. Mr. Panora has a bachelor's and master's degrees in Chemical Engineering from Tufts University.

Bonnie J. Brown, age 51, has been our Chief Financial Officer since 2007, our Secretary since 2010 and our Treasurer as of January 1, 2013. Ms. Brown joined the Company in 2005 as Controller. She has also been the Chief Financial Officer of Ilios Inc. since its inception in 2009. Prior to joining Tecogen, Ms. Brown was a partner at Sullivan Bille PC, a regional accounting firm, for 15 years where she provided financial, accounting, audit, tax, and business consulting services for mid-sized companies. Ms. Brown has also worked at Enterprise Bank and Trust (NASDAQ:EBTC) as project manager for special assignments including branch acquisitions and information systems transitions in the trust department eventually serving as Internal Audit Director, establishing an in-house audit function. She has also provided independent contractor services for a wide variety of publicly traded and closely held companies, including consulting, internal control and Sarbanes-Oxley compliance services. Ms. Brown is a CPA and holds a B.S. in Accountancy from Bentley College and an M.S. in Computer Information Systems from Boston University.

George N. Hatsopoulos, age 87, has been a member of our Board since the organization of the Company in 2000. He is the founder and Chief Executive Officer of Pharos, LLC, an organization devoted to the creation of leading edge business ventures and he is a former member of the Board of Directors of American DG Energy Inc., an affiliated company by virtue of common ownership. He is the founder and chairman emeritus of Thermo Electron Corporation and served as Chairman and Chief Executive Officer since its founding in 1956 until his retirement from those positions in 1999. Dr. Hatsopoulos has served on the board of the Federal Reserve Bank of Boston, including a term as chairman. He was a member of the Securities and Exchange Commission Advisory Committee on Capital Formation and Regulatory Process, the Advisory Committee of the U.S. Export-Import Bank, and the boards of various corporations and institutions. Dr. Hatsopoulos is a fellow of the American Academy of Arts and Sciences, the American Society of Mechanical Engineers and other scientific and technical organizations. He is the recipient of numerous honors and awards in engineering, science, industry and academics, has authored over 60 articles in professional journals, and is the principal author of textbooks on thermodynamics and thermionic energy conversion. Dr. Hatsopoulos has been a faculty member and senior lecturer at Massachusetts Institute of Technology and continues his association with MIT as a Life Member of the Corporation. Dr. Hatsopoulos holds bachelors, masters and doctorate degrees from MIT, all in mechanical engineering.

Our Board of Directors has determined that Dr. Hatsopoulos' prior experience as founder, Chairman and Chief Executive Officer of Thermo Electron Corporation, where he demonstrated leadership capability and gained extensive expertise involving complex financial matters, and his extensive knowledge of complex financial and operational

issues qualify him to be a member of the Board of Directors in light of the Company's business and structure.

Ahmed H. Ghoniem, age 62, has been a member of our Board since 2008. He is the Ronald C. Crane Professor of Mechanical Engineering at MIT. He is also the director of the Center for 21st Century Energy, and the head of Energy Science and Engineering at MIT, where he plays a leadership role in many energy-related activities, initiatives and programs. Mr. Ghoniem joined MIT as an assistant professor in 1983. He is an associate fellow of the American Institute of Aeronautics and Astronautics, and Fellow of American Society of Mechanical Engineers. Recently, he was granted the KAUST Investigator Award. He is a member of the Board of Directors of EuroSite Power Inc., and Ilios Inc., which are affiliated companies by virtue of common ownership. Mr. Ghoniem holds a Ph.D. in Mechanical Engineering from the University of California, Berkeley, and an M.S. and B.S. in Mechanical Engineering from Cairo University.

Our Board of Directors has determined that Dr. Ghoniem's prior experience as a Professor of Mechanical Engineering at MIT and his prior experience in the energy sector qualify him to be a member of our Board of Directors in light of our business and structure.

Table of Contents
TECOGEN INC.

Charles T. Maxwell, age 82, has been a member of our Board since 2001. He is a widely recognized expert in the energy sector, with over 40 years of experience with major oil companies and investment banking firms. From 1999, until his retirement in 2012, Mr. Maxwell was a Senior Energy Analyst with Weeden & Co. of Greenwich, Connecticut, since 1999, where he develops strategic data and forecasts on oil, gas, and power markets. Mr. Maxwell is a member of the Board of Directors of American DG Energy, an affiliated company by virtue of common ownership. Since the early 1980s, he has been an active member of an Oxford-based organization comprised of present or past OPEC-county oil ministers and other oil industry executives from 30 countries who meet twice annually to analyze trends in global energy markets. He is a member of the board of directors of Daleco Resources Corporation (OTCQB: DLOV) and Lescarden Inc. (OTC: LCAR). Mr. Maxwell holds a bachelor's degree in political science from Princeton University and holds a B.A. from Oxford University as a Marshall Scholar in Middle East literature and history.

Our Board of Directors has determined that Mr. Maxwell's prior experience in the energy sector and his extensive experience as a director of public companies qualifies him to be a member of the Board of Directors in light of the Company's business and structure.

Joseph E. Aoun, age 60, has been a member of our Board since 2011. He has been President of Northeastern University since 2006. President Aoun is recognized as a leader in higher education policy and serves on the board of directors of the American Council on Education as well as the Boston Private Industry Council, Boston World Partnerships, Jobs for Mass, and the New England Council. He is a member of the Executive Committee of the Greater Boston Chamber of Commerce, a member of the Massachusetts Business Roundtable and Massachusetts Math & Science Initiative, and serves on the Leadership Council for the Mass Life Sciences Collaborative and as co-chair of the City to City Boston initiative. President Aoun is the recipient of numerous honors and awards and is an internationally known scholar in linguistics. President Aoun holds a master's degree in Oriental Languages and Literature from Saint Joseph University, Beirut, Lebanon, Diploma of Advanced Study General and Theoretical Linguistics, University of Paris VIII, Paris, France, and a Ph.D. Linguistics and Philosophy from MIT.

Our Board of Directors has determined that Dr. Aoun's prior experience as the President of Northeastern University and his prior experience in the energy sector qualify him to be a member of our Board of Directors in light of our business and structure.

Each executive officer is elected or appointed by, and serves at the discretion of, our Board of Directors. The elected officers of the Company will hold office until their successors are duly elected and qualified, or until their earlier resignation or removal.

Family Relationships

There are no family relationships among members of our Board of Directors and executive officers other than George N. Hatsopoulos and John N. Hatsopoulos, who are brothers.

Board Composition

The number of directors of the Company is established by the Board of Directors in accordance with our bylaws. The exact number of directors is currently set at six by resolution of the Board of Directors. The directors are elected to serve for one (1) year terms, with the term of directors expiring each year at the annual meeting of stockholders; provided further, that the term of each director shall continue until the election and qualification of a successor and be subject to such director's earlier death, resignation or removal.

Our certificate of incorporation and bylaws provide that the authorized number of directors may be changed only by resolution of the Board of Directors, and also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least two thirds of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our Board of Directors, including a vacancy resulting from an enlargement of our Board of Directors, may be filled only by vote of a majority of our directors then in office.

We have no formal policy regarding board diversity. Our priority in selection of board members is identification of members who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business and understanding of the competitive landscape.

Table of Contents
TECOGEN INC.

Board Committees

Our Board of Directors directs the management of our business and affairs and conducts its business through meetings of the Board of Directors and our committees: the Audit Committee, the Compensation Committee and the Nominating and Governance Committee.

The members of the Audit Committee are Dr. Ghoniem, Ms. Galiteva and Mr. Maxwell. The members of the Compensation Committee are Dr. Aoun, Ms. Galiteva and Dr. Ghoniem. The members of our Nominating and Governance Committee are Dr. Aoun, Dr. Ghoniem and Mr. Maxwell. All committee members have been determined to be independent by our Board of Directors in accordance with the rules of the NASDAQ Capital Markets. The Board of Directors has also determined that Mr. Maxwell qualifies as an Audit Committee financial expert. In addition, from time to time, other committees may be established under the direction of the Board of Directors when necessary to address specific issues.

The functions of the Audit Committee include reviewing and supervising the financial controls of the Company, appointing, compensating and overseeing the work of the independent auditors, reviewing the books and accounts of the Company, meeting with the officers of the Company regarding the Company's financial controls, acting upon recommendations of the independent auditors and taking such further actions as the Audit Committee deems necessary to complete an audit of the books and accounts of the Company. The charter of the Audit Committee is available on the Company’s website at www.tecogen.com.

The Compensation Committee's functions include reviewing with management cash and other compensation policies for employees, making recommendations to the Board of Directors regarding compensation matters and determining compensation for the Chief Executive Officer. Our Chief Executive Officer has been instrumental in the design and recommendation to the Compensation Committee of compensation plans and awards for our directors and executive officers including our President, Chief Operating Officer and Chief Financial Officer. All compensation decisions for the Chief Executive Officer and all other executive officers are reviewed and approved by the Compensation Committee, subject to ratification by the Board of Directors. The charter of the Compensation Committee is available on the Company’s website at www.tecogen.com.

The Nominating and Governance Committee functions are to identify persons qualified to serve as members of the Board of Directors, to recommend to the Board of Directors persons to be nominated by the Board of Directors for election as directors at the annual meeting of stockholders and persons to be elected by the board to fill any vacancies, and recommend to the Board of Directors persons to be appointed to each of its committees. In addition, the Nominating and Governance Committee is responsible for developing and recommending to the Board of Directors a set of corporate governance guidelines applicable to the Company (as well as reviewing and reassessing the adequacy of such guidelines as it deems appropriate from time to time) and overseeing the annual self-evaluation of the Board of Directors. The charter of the Nominating and Governance Committee is available on the Company’s website at www.tecogen.com.

Director Compensation

Each director who is not also one of our employees will receive a fee of $500 per day for service on those days that our Board of Directors and or each of the Audit, Compensation or Nominating and Governance Committees hold meetings, or otherwise conduct business. Non-employee directors also will be eligible to receive stock or options awards under our 2006 Stock Incentive Plan, as amended, or the Stock Plan. We reimburse all of our non-employee directors for reasonable travel and other expenses incurred in attending Board of Directors and committee meetings. Any director who is also one of our employees receives no additional compensation for serving as a director. Our

non-employee directors did not receive any compensation in cash prior to or during 2010. Until December 2011, the compensation of directors was only in stock awards.

Board Leadership Structure

We separate the roles of Chief Executive Officer and Chairman in recognition of the differences between the two roles. Our Chief Executive Officer is responsible for setting the strategic direction for the Company and the overall leadership and performance of the Company. Our Chairman provides guidance to the Chief Executive Officer, sets the agenda for Board of Director meetings, presides over meetings of the full Board of Directors and leads all executive meetings of the independent directors. We are a small company with a small management team, and we feel the separation of these roles enhances high-level attention to our business.

Table of Contents
TECOGEN INC.

Our Board of Directors Role in Risk Oversight

Our Board of Directors oversees our risk management processes directly and through its committees. Our management is responsible for risk management on a day-to-day basis. The Audit Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to risk management in the areas of financial reporting, internal controls and compliance with legal and regulatory requirements, and discusses policies with respect to risk assessment and risk management, including guidelines and policies to govern the process by which the Company's exposure to risk is handled. The Compensation Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs. The Nominating and Governance Committee assists the Board of Directors in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors, and corporate governance.

Code of Business Conduct and Ethics

The Company has adopted a code of business conduct and ethics that applies to the Company's directors, officers and employees. The Company's code of business conduct and ethics is intended to promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest between personal and professional relationships; full, fair, accurate, timely and understandable disclosure in reports and documents that the Company files with, or submits to, the SEC and in other public communications made by the Company; compliance with applicable governmental laws, rules and regulations; prompt internal reporting of violations of the code of business conduct and ethics to an appropriate person or persons identified in the code of business conduct and ethics; and accountability for adherence to the code of business conduct and ethics. The Company's code of business conduct and ethics is available on the Company's website at www.tecogen.com and is included as Exhibit No. 14.1 hereto. A printed copy of the Company's code of business conduct and ethics is also available free of charge to any person who requests a copy by writing to our Secretary, Tecogen Inc., 45 First Avenue, Waltham, MA 02451.

Section 16(a) Beneficial Ownership Reporting Compliance

Not applicable.

Table of Contents
TECOGEN INC.

Item 11. Executive Compensation.

The Compensation Committee and Board of Directors construct policies and guidelines regarding executive compensation. The major components of executive compensation will be base salary, annual incentive bonuses, equity incentive awards and customary employee benefits. Among the factors likely to be relevant are:

- the executive officer's skills and experience;
- the particular importance of the executive officer's position to us;
- the executive officer's individual performance;
- the executive officer's growth in his or her position; and
- base salaries for comparable positions within our Company and at other companies.

Our Compensation Committee performs evaluations of our executive officers' compensation at least annually and may solicit the input of a compensation consulting firm and peer group benchmarking data in making any adjustments believed to be appropriate.

The following table sets forth information with respect to the compensation of our executive officers for the Company's last two completed fiscal years:

Summary Compensation Table

Name and principal position	Year	Salary ($)	Bonus ($)	Stock awards ($)	Option awards ($)(1)	All other compensation ($)	Total ($)
John N. Hatsopoulos	2013	1	—	—	—	—	1
Chief Executive Officer	2012	1	—	—	—	—	1
(Principal Executive Officer)							
Robert A. Panora (2)	2013	163,770	—	—	—	1,032	164,802
Chief Operating Officer and President	2012	163,770	—	—	—	1,032	164,802
Bonnie J. Brown (3)	2013	156,000	—	—	—	360	156,360
Chief Financial Officer, Treasurer and Secretary	2012	156,000	—	—	—	360	156,360
(Principal Financial Officer)							
Anthony S. Loumidis (4)							
Former Vice President and Treasurer	2012	25,091	—	—	—	—	25,091

---

(1) The amounts in the "Stock Option Awards" column reflect the aggregate grant date fair value of the awards computed in accordance with FASB ASC Topic 718. The assumptions used by us with respect to the valuation of stock and option awards are set forth in Note 10 – Stockholders' equity to our financial statements included elsewhere in this registration statement.

(2) Includes group life insurance of $1,032 for 2013 and 2012, respectively.

(3) Includes group life insurance of $360 for 2013 and 2012.

(4) Mr. Loumidis resigned as Vice President and Treasurer of the Company effective December 31, 2012.

Table of Contents
TECOGEN INC.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information with respect to outstanding equity awards held by our executive officers as of December 31, 2013:

	Option awards				Stock awards	
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested ($)[1]
John N. Hatsopoulos	—	—	—	—	—	—
Robert A. Panora [2][3]	62,500	62,500	2.60	2/14/2021	138,350	622,575
Bonnie J. Brown [4][5]	25,000	—	1.20	2/13/2015	12,500	56,250
Bonnie J. Brown [6]	50,000	—	2.00	3/11/2019	—	—
Bonnie J. Brown [7]	18,750	6,250	2.60	2/18/2020	—	—

---

(1) Market value of shares of stock that have not vested is computed on the last private placement price of the Company's Common Stock on January 17, 2014, which was $4.50 per share.

(2) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Mr. Panora's continued employment and subject to acceleration of vesting upon a change in control.

(3) Includes 138,350 shares of restricted Common Stock at a purchase price of $.001 per share granted on December 4, 2006, with 100% of the shares vesting one year after the Company's initial public offering, subject to acceleration of vesting upon a change in control prior to a termination event.

(4) Includes stock option award granted on February 13, 2008, with 25% of the shares vesting on February 13, 2009 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's continued employment and subject to acceleration of vesting upon a change in control.

(5) Includes 12,500 shares of restricted Common Stock at a purchase price of $.004 per share granted on December 13, 2006, with 100% of the shares vesting one year after the Company's initial public offering, subject to acceleration of vesting upon a change in control prior to a termination event.

(6) Includes stock option award granted on March 11, 2009, with 25% of the shares vesting on March 11, 2010 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's continued employment and subject to acceleration of vesting upon a change in control.

(7) Includes stock option award granted on February 28, 2010, with 25% of the shares vesting on February 28, 2011 and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, subject to Ms. Brown's continued employment and subject to acceleration of vesting upon a change in control.

Director Compensation

Each director who is not also one of our employees will receive a fee of $500 per day for service on those days that our Board of Directors and or each of the Audit, Compensation or Nominating and Governance Committees hold meetings, or otherwise conduct business. Non-employee directors also will be eligible to receive stock or option awards under our equity incentive plan. We reimburse all of our non-employee directors for reasonable travel and other expenses incurred in attending Board and committee meetings. Any director who is also one of our employees receives no additional compensation for serving as a director.

50

Table of Contents
TECOGEN INC.

The following table sets forth information with respect to the compensation of our directors as of December 31, 2013:

Name	Fees earned or paid in cash ($)	Stock awards ($)	Option awards ($)	All other compensation ($)	Total ($)
Angelina M. Galiteva	1,500	—	—	—	1,500
John N. Hatsopoulos	—	—	—	—	—
George N. Hatsopoulos	—	—	—	—	—
Ahmed F. Ghoniem	500	—	—	—	500
Charles T. Maxwell	1,000	—	—	—	1,000
Joseph E. Aoun	—	—	—	—	—

Outstanding Equity Awards at Fiscal Year-End Table

The following table summarizes the outstanding equity awards held by each director as of December 31, 2013:

	Option awards				Stock awards	
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)	Option expiration date	Number of shares of stock that have not vested (#)	Market value of shares of stock that have not vested ($)(1)
Angelina M. Galiteva (2)(3)	12,500	12,500	2.60	2/14/2021	25,000	112,500
John N. Hatsopoulos	—	—	—	—	—	—
George N. Hatsopoulos	—	—	—	—	—	—
Ahmed F. Ghoniem (4)(5)	12,500	12,500	2.60	2/14/2021	25,000	112,500
Charles T. Maxwell (6)(7)	12,500	12,500	2.60	2/14/2021	25,000	112,500
Joseph E. Aoun (8)	—	25,000	4.50	12/31/2023	—	—

(1) Market value of shares of Common Stock that have not vested is computed by the Company's most recent private placement of Common Stock on January 17, 2014, which was $4.50 per share.

(2) Includes 25,000 shares of restricted Common Stock at a purchase price of $.004 per share granted on December 13, 2006, with 100% of the shares vesting one year after the Company's initial public offering.

(3) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Ms. Galiteva serves as a director or consultant to the Company.

(4) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Ghoniem serves as a director or consultant to the Company.

(5) Includes 25,000 shares of restricted Common Stock at a purchase price of $.004 per share granted on October 1, 2008, with 100% of the shares vesting 180 days after the Company's initial public offering.

(6) Includes stock option award granted on February 15, 2011, with 25% of the shares vesting on February 15, 2012, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Mr. Maxwell serves as a director or consultant to the Company.

(7)

(7) Includes 25,000 shares of restricted Common Stock at a purchase price of $.004 per share granted on October 1, 2008, with 100% of the shares vesting 180 days after the Company's initial public offering.

(8) Includes stock option award granted on December 31, 2013, with 25% of the shares vesting on December 31, 2014, and then an additional 25% of the shares vesting on each of the subsequent three anniversaries, provided that Dr. Aoun serves as a director or consultant to the Company.

There have been no other stock awards granted to date and none of such options have been exercised.

Table of Contents
TECOGEN INC.

2006 Stock Incentive Plan

The Company's 2006 Stock Incentive Plan, or Stock Plan, provides for the grant of stock-based awards to employees, officers and directors of, and consultants or advisors to, the Company and any of its present or future parents, subsidiaries or affiliates. The Stock Plan is included as Exhibit 10.1 hereto.

Under the Stock Plan, the Company may grant stock options, restricted stock and other stock-based awards. As of December 31, 2013, a total of 1,148,000 shares of Common Stock may be issued upon the exercise of options or other awards granted under the Stock Plan.

The Stock Plan is administered by the Board of Directors and the Compensation Committee. Subject to the provisions of the Stock Plan, the Board of Directors and the Compensation Committee each has the authority to select the persons, to whom awards are granted and determine the terms of each award, including the number of shares of Common Stock subject to the award. Payment of the exercise price of an award may be made in cash, in a "cashless exercise" through a broker, or if the applicable stock option agreement permits, shares of Common Stock or by any other method approved by the Board of Directors or Compensation Committee. Unless otherwise permitted by the Company, awards are not assignable or transferable except by will or the laws of descent and distribution.

Upon the consummation of an acquisition of the business of the Company, by merger or otherwise, the Board of Directors shall, as to outstanding awards (on the same basis or on different bases as the Board of Directors shall specify), make appropriate provision for the continuation of such awards by the Company or the assumption of such awards by the surviving or acquiring entity and by substituting on an equitable basis for the shares then subject to such awards either (a) the consideration payable with respect to the outstanding shares of Common Stock in connection with the acquisition, (b) shares of stock of the surviving or acquiring corporation or (c) such other securities or other consideration as the Board of Directors deems appropriate, the fair market value of which (as determined by the Board of Directors in its sole discretion) shall not materially differ from the fair market value of the shares of Common Stock subject to such awards immediately preceding the acquisition. In addition to or in lieu of the foregoing, with respect to outstanding stock options, the Board of Directors may, on the same basis or on different bases as the Board of Directors shall specify, upon written notice to the affected optionees, provide that one or more options then outstanding must be exercised, in whole or in part, within a specified number of days of the date of such notice, at the end of which period such options shall terminate, or provide that one or more options then outstanding, in whole or in part, shall be terminated in exchange for a cash payment equal to the excess of the fair market value (as determined by the Board of Directors in its sole discretion) for the shares subject to such options over the exercise price thereof.

The Board of Directors may at any time provide that any stock options shall become immediately exercisable in full or in part, that any restricted stock awards shall be free of some or all restrictions, or that any other stock-based awards may become exercisable in full or in part or free of some or all restrictions or conditions, or otherwise realizable in full or in part, as the case may be.

The Board of Directors or Compensation Committee may, in its sole discretion, amend, modify or terminate any award granted or made under the Stock Plan, so long as such amendment, modification or termination would not materially and adversely affect the participant.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serve as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our Board of Directors or Compensation Committee. None of the current members of the Compensation

Committee of our Board of Directors has ever been one of our employees.

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

None of our executive officers has an employment contract or change-in-control arrangement, other than stock and option awards that contain certain change-in-control provisions such as accelerated vesting due to acquisition. In the event an acquisition that is not a private transaction occurs while the optionee maintains a business relationship with the Company and the option has not fully vested, the option will become exercisable for 100% of the then number of shares as to which it has not vested and such vesting to occur immediately prior to the closing of the acquisition.

Table of Contents
TECOGEN INC.

The stock and option awards that would vest for each named executive if a change-in-control were to occur are disclosed under our Outstanding Equity Awards at Fiscal Year-End Table. Specifically, as of December 31, 2013, Robert A. Panora, our Chief Operating Officer and President, had 62,500 stock options and 138,350 shares of restricted stock that had not vested and Bonnie J. Brown, our Chief Financial Officer, had 6,250 stock options and 12,500 shares of restricted stock that had not vested.

Our stock and option awards contain certain change-in-control provisions. Descriptions of those provisions are set forth below:

Stock Awards Change-in-Control Definition

Change-in-Control shall mean (a) the acquisition in a transaction or series of transactions by any person (such term to include anyone deemed a person under Section 13(d)(3) of the Exchange Act), other than the Company or any of its subsidiaries, or any employee benefit plan or related trust of the Company or any of its subsidiaries, of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors; provided a Change-in-Control shall not occur solely as the result of an initial public offering or (b) the sale or other disposition of all or substantially all of the assets of the Company in one transaction or series of related transactions.

Option Awards Change-in-Control Definition

Accelerated vesting due to acquisition. In the event an acquisition that is not a private transaction occurs while the optionee maintains a business relationship with the Company and the option has not fully vested, the option shall become exercisable for 100% of the then number of shares as to which it has not vested, such vesting to occur immediately prior to the closing of the acquisition.

Definitions. The following definitions shall apply to certain terms used in this Section:

Acquisition means (i) the sale of the Company by merger in which the stockholders of the Company in their capacity as such no longer own a majority of the outstanding equity securities of the Company (or its successor); or (ii) any sale of all or substantially all of the assets or capital stock of the Company (other than in a spin-off or similar transaction) or (iii) any other acquisition of the business of the Company, as determined by the Board.

Business relationship means service to the Company or its successor in the capacity of an employee, officer, director or consultant.

Private transaction means any acquisition where the consideration received or retained by the holders of the then outstanding capital stock of the Company does not consist of (i) cash or cash equivalent consideration, (ii) securities which are registered under the Securities Act, or any successor statute or (iii) securities for which the Company or any other issuer thereof has agreed, including pursuant to a demand, to file a registration statement within 90 days of completion of the transaction for resale to the public pursuant to the Securities Act.

Table of Contents
TECOGEN INC.

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

The table below sets forth information with respect to the beneficial ownership of our Common Stock as of March 18, 2014 by:

- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known to us to beneficially own more than 5% of our outstanding shares of Common Stock.

Except as otherwise indicated, to our knowledge, the persons named in the table below have sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned by them, subject to community property laws, where applicable, and the address for each of the named directors and executive officers is 45 First Avenue, Waltham, MA 02451.

The number of shares beneficially owned by each shareholder is determined under rules promulgated by the SEC. The information does not necessarily indicate beneficial ownership for any other purpose. Under those rules, the number of shares of Common Stock deemed outstanding includes shares issuable upon exercise of stock options held by the respective person or group that may be exercised within 60 days of March 18, 2014. For purposes of calculating each person's or group's percentage ownership, shares of Common Stock issuable pursuant to stock options exercisable within 60 days after March 18, 2014 are reflected in the table below and included as outstanding and beneficially owned for that person or group but are not treated as outstanding for the purpose of computing the percentage ownership of any other person or group. The percentages of shares outstanding provided in the table are based on a total of 15,156,600 shares of our Common Stock outstanding on March 18, 2014.

Name and address of beneficial owner	Amount and Nature of Beneficial Ownership	Percent of Class
5% Stockholders:		
John N. Hatsopoulos (1)	3,718,939	24.5 %
George N. Hatsopoulos (2)	3,554,651	23.5 %
Michaelson Capital Special Finance Fund LP (3)	1,000,001	6.4 %
RBC Cees Nominees Limited (4)	904,105	6.0 %
Joseph J. Ritchie (5)	896,613	5.9 %
Directors and Officers:		
John N. Hatsopoulos (1)	3,718,939	24.5 %
George N. Hatsopoulos (2)	3,554,651	23.5 %
Robert A. Panora (6)	225,850	1.5 %
Bonnie J. Brown (7)	106,250	0.7 %
Charles T. Maxwell (8)	87,500	0.6 %
Angelina M. Galiteva (9)	62,500	0.4 %
Ahmed F. Ghoniem (10)	37,500	0.2 %
Joseph E. Aoun	—	— %
All executive officers and directors as a group (8 persons)	7,793,190	51.4 %

(1) Includes:(a) 2,135,210 shares of Common Stock held by J&P Enterprises LLC for the benefit of: (1) John N. Hatsopoulos and (2) Patricia L. Hatsopoulos. John N. Hatsopoulos is the Executive Member of J&P Enterprises LLC and has voting and investment power; (b) 593,770 shares of Common Stock held by John N. Hatsopoulos and

his wife, Patricia L. Hatsopoulos, as joint tenants with rights of survivorship, each of whom share voting and investment power; and (c) 989,859 shares of Common Stock held by The John N. Hatsopoulos Family Trust 2007 for the benefit of: (1) Patricia L. Hatsopoulos, (2) Alexander J. Hatsopoulos, and (3) Nia Marie Hatsopoulos, for which Dr. George N.

Table of Contents
TECOGEN INC.

Hatsopoulos and Ms. Patricia L. Hatsopoulos are the trustees; and (d) 100 shares of Common Stock held by Patricia L. Hatsopoulos, John's spouse.

(2) Includes: (a) 1,304,651 shares of Common Stock, directly held by Dr. George N. Hatsopoulos; (b) 2,250,000 shares of Common Stock held by The Hatsopoulos Family 2012 Trust.This amount does not include (a) 234,049 shares held in the 1994 Hatsopoulos Family Trust for the benefit of Marina Hatsopoulos Bornhorst, for which Ms. Daphne Hatsopoulos and Mr. Gordon Erhlich are the trustees. The trusts are for the benefit of Dr. Hatsopoulos's adult children. Dr. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.

(3) Includes: (a) 444,445 shares of Common Stock purchased December 23, 2013; and (b) 555,556 shares of Common Stock issuable upon conversion of $3,000,000 principal amount of 4% convertible debentures.

(4) Includes 904,105 shares of Common Stock purchased in August 2010 and November 2011 held by RBC cees Nominees Ltd. The address of RBC cees Nominees Ltd. is 19-21 Broad Street, St. Hellier, Jersey JE1 3PB, Channel Islands.

(5) Includes 896,613 shares of Common Stock, directly held by Mr. Ritchie. The address of Mr. Ritchie is 2100 Enterprise Avenue, Geneva, IL 60134.

(6) Includes: (a) 163,350 shares of Common Stock, directly held by Mr. Panora, and (b) options to purchase 62,500 shares of Common Stock exercisable within 60 days of the date of March 31, 2014 .

(7) Includes: (a) 12,500 shares of Common Stock, directly held by Ms. Brown, and (b) options to purchase 93,750 shares of Common Stock exercisable within 60 days of the date of March 31, 2014.

(8) Includes: (a) 75,000 shares of Common Stock, directly held by Mr. Maxwell, and (b) options to purchase 12,500 shares of Common Stock exercisable within 60 days of the date of March 31, 2014.

(9) Includes: (a) 50,000 shares of Common Stock, directly held by Ms. Galiteva and (b) options to purchase 12,500 shares of Common Stock exercisable within 60 days of the date of March 31, 2014.

(10) Includes: (a) 25,000 shares of Common Stock, directly held by Mr. Ghoniem, and (b) options to purchase 12,500 shares of Common Stock exercisable within 60 days of the date of March 31, 2014.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2013, regarding Common Stock that may be issued under the Company’s equity compensation plans.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in second column)
Equity compensation plans approved by security holders	1,148,000	$2.13	540,732
Equity compensation plans not approved by security holders	—	—	—
Total	1,148,000	$2.13	540,732

In February 2011, our management conducted an assessment of the risks associated with our compensation policies and practices. This process included a review of our compensation programs, a discussion of the types of practices that could be reasonably likely to create material risks, and an analysis of the potential effects on the Company on related risks as a whole.

Although we reviewed all of our compensation programs, we paid particular attention to programs involving incentive-based payouts and programs that involve our executive officers. During the course of our assessment, we

consulted with the Compensation Committee of our Board of Directors.

Table of Contents
TECOGEN INC.

We believe that our compensation programs are designed to create appropriate incentives without encouraging excessive risk taking by our employees. In this regard, our compensation structure contains various features intended to mitigate risk. For example:

- None of our executive officers receives any performance-based compensation or incentive payments.
- A portion of the compensation package for our sales-based employees consists of commissions for units sold and installed, which package is designed to link an appropriate portion of compensation to long-term performance, while providing a balanced compensation model overall.
- The Compensation Committee oversees our compensation policies and practices and is responsible for reviewing and approving executive compensation, annual incentive compensation plans applicable to sales employees and other compensation plans.

Our Compensation Committee, in its evaluation, determined that it does not believe that the Company employs any compensation plans or practices that create incentives for employees to deliver short-term profits at the expense of generating systematic risks for the Company. Based on this and the assessment described above, we have concluded that the risks associated with our compensation policies and practices are not reasonably likely to have material adverse effect on the Company.

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

The Company has five affiliated companies: (a) American DG Energy, a publicly traded company that distributes, owns and operates on-site energy systems that produce electricity, hot water, heat, and cooling in the United States; (b) EuroSite Power, a publicly traded company that distributes, owns, and operates on-site energy systems that produce electricity, hot water, heat, and cooling in the United Kingdom and Europe; (c) GlenRose Instruments, a company that provides radiological services, operates a radiochemistry laboratory network, and provides radiological characterization and analysis, hazardous, radioactive, and mixed waste management, facility, environmental, safety, and industrial hygiene health management; (d) Pharos, a private company that offers investment services in the healthcare sector; and (e) Levitronix Technologies LLC, or Levitronix, a worldwide leader in magnetically levitated bearingless motor technology, specializing in supplying medical blood pumps to the medical community and ultra-pure fluid handling devices for microelectronics, life science, and industrial applications.

These companies are affiliates because several of the major stockholders of those companies have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos, and Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos, or Levitronix. The businesses of GlenRose Instruments, Pharos, and Levitronix are not related to the business of the Company.

American DG Energy, EuroSite Power, GlenRose Instruments, Pharos and Levitronix are affiliated companies by virtue of common ownership. The common stockholders include:

- John N. Hatsopoulos, the Company’s Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 10.7% of the company’s common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 7.2% of the company’s common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of the company’s common stock.

- Dr. George N. Hatsopoulos, who is John N. Hatsopoulos’ brother, and is also: (a) a director of American DG Energy and holds 13.6% of the company’s common stock; (b) an investor in Ilios and holds 3.1% of the company’s common stock; (c) an investor of GlenRose Instruments and holds 15.7% of the company’s common stock; (d) an investor of

Pharos and may be deemed to hold 24.4% of the company's common stock; and (e) a director and an investor of Levitronix and may be deemed to hold 21.4% of the company's common stock.

Additionally, the following related persons had or may have a direct or indirect material interest in our transactions with our affiliated companies:

- Barry J. Sanders, who is: (a) the President and Chief Operating Officer of American DG Energy, (b) the Chief Executive Officer and a director of EuroSite Power and (c) the Chairman of Ilios.

Table of Contents
TECOGEN INC.

- Anthony S. Loumidis, the Company's former Vice President and Treasurer who is: (a) the former Chief Financial Officer Secretary and Treasurer of American DG Energy, (b) the former Chief Financial Officer Secretary and Treasurer of EuroSite Power, (c) the former Chief Financial Officer Secretary and Treasurer of GlenRose Instruments and (d) the former Treasurer of Ilios.

American DG Energy has sales representation rights to the Company's products and services in New England. Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2013 and 2012 amounted to $758,930 and $3,795,666, respectively.

On October 20, 2009, American DG Energy, in the ordinary course of its business, signed a Sales Representative Agreement with Ilios to promote, sell and service the Ilios high-efficiency heating products, such as the high efficiency water heater, in the marketing territory of the New England states, including Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine. The marketing territory also includes all of the nations in the European Union. The initial term of this Agreement is for five years, after which it may be renewed for successive one-year terms upon mutual written agreement. American DG Energy has not yet sold any products under this agreement and therefore, no amounts have been required to be paid.

On September 24, 2001, the Company entered into subscription agreements with investors for the sale of convertible debentures. The primary investors were George N. Hatsopoulos, who subscribed for debentures having an initial principal amount of $200,000; the John N. Hatsopoulos 1989 Family Trust for the benefit of Nia Marie Hatsopoulos, or the Nia Hatsopoulos Trust, which subscribed for debentures having an initial principal amount of $50,000; and the John N. Hatsopoulos 1989 Family Trust for the benefit of Alexander John Hatsopoulos, or the Alexander Hatsopoulos Trust, which subscribed for debentures having an initial principal amount of $50,000. Nia Hatsopoulos and Alexander Hatsopoulos are John N. Hatsopoulos' adult children. John N. Hatsopoulos disclaims beneficial ownership of the shares held by these trusts. The debentures accrue interest at a rate of 6% per annum and were due on September 24, 2007. The debentures are convertible, at the option of the holder, into shares of Common Stock at a conversion price of $1.20 per share.

On September 24, 2007, George N. Hatsopoulos, the Nia Hatsopoulos Trust and the Alexander Hatsopoulos Trust, holding debentures representing a majority of the then-outstanding principal amount of the debentures, agreed to extend the debenture term to September 24, 2011.

On May 11, 2009, George N. Hatsopoulos converted $109,033 of the principal amount under the debentures held by him, together with accrued interest in the amount of $90,967 into 400,000 shares of Common Stock of Ilios, the Company's then newly-formed subsidiary, which were previously held by the Company, at a conversion price of $0.50 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, Joseph J. Ritchie elected to convert the outstanding principal amount under the debenture held by him, $30,000, together with accrued interest of $14,433, into 37,028 shares of the Company's Common Stock at a conversion price of $1.20 per share.

On September 24, 2011, George N. Hatsopoulos, the Nia Hatsopoulos Trust and the Alexander Hatsopoulos Trust, holding debentures representing a majority of the then-outstanding principal amount of the debentures, agreed to extend the term of the debentures to September 24, 2013 and requested that accrued interest in the aggregate amount of approximately $72,960 be converted into the Company's Common Stock at $2.00 per share (which was the average price of the Company's stock between September 24, 2001 and September 24, 2011). As a result, the Company issued 6,474 shares of Common Stock to George N. Hatsopoulos, 15,003 shares of Common Stock to the Nia Hatsopoulos

Trust and 15,003, shares of Common Stock to the Alexander Hatsopoulos Trust.

On September 30, 2012, the remaining principal amount under the debentures held by the Nia Hatsopoulos Trust and the Alexander Hatsopoulos Trust, including the applicable accrued interest, was converted into 42,620 shares of Common Stock issued to each of the Nia Hatsopoulos Trust and the Alexander Hatsopoulos Trust.

Table of Contents
TECOGEN INC.

On September 20, 2013, the term of the debentures held by George N. Hatsopoulos was extended to October 31, 2013. On October 18, 2013, George N. Hatsopoulos elected to convert the outstanding principal balance of the debenture held by him of $90,967 into 75,806 shares of the Company's Common Stock at a conversion price of $1.20 per share. In addition, Mr. Hatsopoulos requested that the accrued interest earned in 2012 in the amount of $6,913 be converted into 2,161 shares of the Company's Common Stock at a conversion price of $3.20 per share and that the accrued interest earned on or after January 1, 2013 in the amount of $4,366 be converted into 970 shares of the Company's Common Stock at a conversion price of $4.50 per share.

On May 11, 2009, John Hatsopoulos converted an aggregate of $427,432 in principal amount under demand notes held by him, together with accrued interest in the amount of $72,568 into 1,000,000 shares of Common Stock of Ilios, which were previously held by the Company, at a conversion price of $0.50 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 10, 2008, the Company entered into a demand note agreement with John N. Hatsopoulos in the principal amount of $250,000 at an annual interest rate of 5%. On September 7, 2011, the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $750,000 at an annual interest rate of 6%. On November 30, 2012, the Company entered into an additional demand note agreement with John N. Hatsopoulos in the principal amount of $300,000 at an annual interest rate of 6%. On October 3, 2013, the Company signed a demand note for $450,000, which accrues interest at 6%, to John N. Hatsopoulos, the Company's Chief Executive Officer. Unpaid principal and interest on the demand notes are due upon demand. On January 6, 2014 these demand notes were paid in full with accrued interest.

On March 25, 2013, the Company entered into a Revolving Line of Credit Agreement, or the Credit Agreement, with John N. Hatsopoulos, our Chief Executive Officer. Under the terms of the Credit Agreement, as amended on August 13, 2013, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of $1,500,000 from time to time, at the written request of the Company. Any amounts borrowed by the Company pursuant to the Credit Agreement will bear interest at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Repayment of the principal amount borrowed pursuant to the Credit Agreement will be due on March 1, 2014. In addition, the company may prepay accrued interest, provided that prepayment may not be made prior to January 1, 2014. As of December 31, 2013 the Company has borrowed $1,200,000 pursuant to the Credit Agreement. On January 6, 2014, the Company repaid the then outstanding principal balance of $1,200,000 together with accrued interest of $25,347.

If the Company's existing resources, including cash and cash equivalents and future cash flows from operations are not sufficient to meet the working capital requirements of the Company's existing business through 2014, John Hatsopoulos has committed to provide any shortfall in the form of a demand note.

On March 26, 2014, the Company entered into a Revolving Line of Credit Agreement, or the 2014 Credit Agreement, with John N. Hatsopoulos, our Chief Executive Officer. Under the terms of the 2014 Credit Agreement, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of $3,500,000 from time to time, at the written request of the Company. Any amounts borrowed by the Company pursuant to the 2014 Credit Agreement will bear interest at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Repayment of the principal amount borrowed pursuant to the 2014 Credit Agreement will be due on March 25, 2015.

For additional disclosure on the Company's debt see Note 7 – Demand notes payable, convertible debentures and line of credit – related party.

John N. Hatsopoulos' salary is $1.00 per year. On average, Mr. Hatsopoulos spends approximately 50% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

On July 1, 2012 the Company signed a Facilities and Support Services Agreement, or the Facilities and Support Services Agreement, with American DG Energy for a period of one year, renewable annually, on July 1st, by mutual agreement. Under this agreement, the Company provides American DG Energy with certain office and business support services and also provides pricing based on a volume discount depending on the level of American DG Energy purchases of cogeneration and chiller products. For certain sites, American DG Energy hires the Company to service its chiller and cogeneration products. The Company also provides office space and certain utilities to American DG Energy based on a monthly rate set at the beginning of each year. Also, under this agreement, American DG Energy has sales representation rights to the Company's products and services in New England.

Table of Contents
TECOGEN INC.

On July 1, 2013 the Company entered into the First Amendment to the Facilities, Support Services and Business Agreement, or the First Amendment, with American DG Energy. The First Amendment renewed the term of the Facilities and Support Services Agreement for a one year period, beginning on July 1, 2013. The First Amendment also increased the space provided to the Company by Tecogen from approximately 3,071 square feet to 3,282 square feet and from six offices to nine offices. Under the First Amendment, the amount that American DG Energy will pay the Company for the space and services that it provides under the Facilities and Support Services Agreement increased to $6,495 per month. The First Amendment further clarifies that the total sales thresholds for volume discounts are to be met during a calendar year and that American DG Energy's representation rights may be terminated by either the Company or American DG Energy upon 60 days' notice, without cause.

On November 12, 2013, the Company entered into the Second Amendment to the Facilities, Support Services and Business Agreement, or the Second Amendment. The Second Amendment modified the exclusivity arrangement of the Facilities and Support Services Agreement between the Company and American DG Energy to state that in New England States American DG Energy shall have the right to purchase cogeneration products directly from the Company as described in the agreement so long as American DG Energy intends to retain long-term ownership of the cogeneration product and utilize it for the production and sale of electricity and thermal energy. The Company will not sell its products to parties for which the intended use is to earn revenue from metered energy to third parties other than American DG Energy. In cases where American DG Energy has the opportunity to sell cogeneration products to an unaffiliated party in the New England States and where the Company has no other appointed representation in that specific region, American DG Energy may buy/resell the cogeneration product as specified under the terms of the Facilities and Support Services Agreement. If, however, the Company has appointed a local exclusive representative in that specific New England region, American DG Energy will defer to the local representative for pricing and other specific details for working cooperatively.

In July 2013, the Company obtained a letter of credit for approximately $1.1 million in connection with a performance guarantee for certain of its turnkey installations. This letter of credit was collateralized by $1.055 million in personal funds by John N. Hatsopoulos. If Mr. Hatsopoulos had not provided this collateral, the Company may have been required to provide the collateral itself, and may not have been able to do so.

On November 12, 2013, the Company entered into the Second Amendment to the Facilities, Support Services and Business Agreement, or the ADG Amendment, American DG Energy. The Amendment modifies the exclusivity arrangement of the Facilities, Support Services and Business Agreement between the Company and American DG Energy.

On November 12, 2013, Ilios entered into the First Amendment to the Sales Representative Agreement with American DG Energy Inc. The Amendment modifies and defines territories covered under the Agreement.

The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements. For the years ended December 31, 2013 and 2012, the Company received $113,784 and $158,898, respectively, from American DG Energy, Levitronix LLC and Alexandros Partners LLC. In addition, for the years ended December 31, 2013 and 2012 the Company received from the same companies, $90,348 and $101,218, respectively, to offset common operating expenses incurred in the administration and maintenance of its corporate office and warehouse facility.

The Company's headquarters is located in Waltham, Massachusetts and consists of 27,000 square feet of office and storage space that are shared with American DG Energy and other tenants. The lease expires on March 31, 2024. We believe that our facilities are appropriate and adequate for our current needs.

Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2013 and 2012 amounted to $758,930 and $3,795,666, respectively. In addition, Tecogen pays certain operating expenses, including benefits and insurance, on behalf of American DG Energy. Tecogen was reimbursed for these costs. As of December 31, 2013 the total amount due to American DG Energy was $119,667 As of December 31, 2012, the total amount due from American DG Energy was $70,811.

For additional disclosure related to our related parties and related party transactions see Note 13 — Related party transactions to our financial statements included in this Annual Report on Form 10-K.

Table of Contents
TECOGEN INC.

Director Independence

The Company’s policy is that a majority of our Board of Directors shall be “independent” in accordance with NYSE MKT rules (even though the Company is not currently subject to those requirements) including, in the judgment of the Board of Directors, the requirement that such directors have no material relationship with the Company (either directly or as a partner, stockholder or officer of an organization that has a relationship with the Company). The Board of Directors has adopted the following standards to assist it in determining whether a director has a material relationship with the Company. Under these standards, a director will not be considered to have a material relationship with the Company if he or she is not:

(a) a director who is, or during the past three years was, employed by the company, other than prior employment as an interim executive officer (provided the interim employment did not last longer than one year);

(b) a director who accepted or has an immediate family member who accepted any compensation from the company in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, other than the following:

(i) compensation for board or board committee service;

(ii) compensation paid to an immediate family member who is an employee (other than an executive officer) of the company;

(iii) compensation received for former service as an interim executive officer (provided the interim employment did not last longer than one year); or

(iv) benefits under a tax-qualified retirement plan, or non-discretionary compensation;

(c) a director who is an immediate family member of an individual who is, or at any time during the past three years was, employed by the company as an executive officer;

(d) a director who is, or has an immediate family member who is, a partner in, or a controlling shareholder or an executive officer of, any organization to which the company made, or from which the company received, payments (other than those arising solely from investments in the company's securities or payments under non-discretionary charitable contribution matching programs) that exceed 5% of the organization's consolidated gross revenues for that year, or $200,000, whichever is more, in any of the most recent three fiscal years;

(e) a director who is, or has an immediate family member who is, employed as an executive officer of another entity where at any time during the most recent three fiscal years any of the issuer's executive officers serve on the compensation committee of such other entity; or

(f) a director who is, or has an immediate family member who is, a current partner of the company's outside auditor, or was a partner or employee of the company's outside auditor who worked on the company's audit at any time during any of the past three years.

Ownership of a significant amount of the Company’s stock, by itself, does not constitute a material relationship. For relationships not covered by these standards, the determination of whether a material relationship exists shall be made by the other members of the Board of Directors who are independent (as defined above).

TECOGEN INC.

Item 14. Principal Accountant Fees and Services.

The following table summarizes fees billed to the Company by McGladrey LLP for professional services rendered for the years ended December 31, 2013 and 2012:

	December 31, 2013	December 31, 2012
Audit fees	$137,000	$121,000
Audit-related fees (1)	101,110	69,500
Tax fees	—	—
All other fees	—	—
Total	$238,110	$190,500

(1) Represents initial public offering accounting and auditing costs.

Table of Contents
TECOGEN INC.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

The following consolidated financial statements and the related notes thereto of Tecogen Inc. and the Accounting Firm thereon are filed as part of this Annual Report on Form 10-K.

(a) REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

INDEX TO FINANCIAL STATEMENTS AND FINANCIAL STATEMENTS SCHEDULES:

Consolidated Balance Sheets as of December 31, 2013 and December 31, 2012

Consolidated Statements of Operations for the years ended December 31, 2013 and December 31, 2012

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2013 and December 31, 2012

Consolidated Statements of Cash Flows for the years ended December 31, 2013 and December 31, 2012

Notes to Consolidated Financial Statements

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, or are inapplicable, and therefore have been omitted.

Table of Contents
TECOGEN INC.

(b) Exhibits

Exhibit Number	Description
3.1	Certificate of Incorporation, as amended and restated February 11, 2013 (incorporated by reference to Exhibit 3.2 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
3.2	Bylaws as amended and restated February 14, 2013 (incorporated by reference to Exhibit 3.4 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
4.1	Specimen Common Stock Certificate of Tecogen Inc (incorporated by reference to Exhibit 4.1 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
4.2	Form of Restricted Stock Purchase Agreement (incorporated by reference to Exhibit 4.2 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
4.3*	Form of Stock Option Agreement (incorporated by reference to Exhibit 4.3 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
4.4	Indenture and Form of 6% Convertible Debenture Due 2004, dated September 24, 2001 (incorporated by reference to Exhibit 4.4 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.1*	Tecogen Inc. 2006 Stock Incentive Plan, as amended on November 10, 2011 (incorporated by reference to Exhibit 10.5 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.2	Form of Tecogen Inc. Subscription Agreement for private placement of Common Stock (incorporated by reference to Exhibit 10.5 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.3+	Facilities, Support Services and Business Agreement between American DG Energy Inc. and Tecogen Inc., dated January 1, 2006 (incorporated by reference to Exhibit 10.6 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.4	First Amendment to the Facilities, Support Services, and Business Agreement between American DG Energy Inc. and Tecogen Inc., dated as of July 1, 2013 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K, originally filed with the SEC on July 3, 2013).
10.5	Second Amendment to the Facilities, Support Services, and Business Agreement between American DG Energy Inc. and Tecogen Inc., dated November 12, 2013 (incorporated by reference to Exhibit 10.1 to the Company’s Form 10-Q for the quarter ended September 30, 2013, originally filed with the SEC on November 14, 2013).
10.6+	General Motors LLC, Customer Care and Aftersales Agreement, dated November 15, 2011 (incorporated by reference to Exhibit 10.7 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.7	Lease Agreement between Atlantic-Waltham Investment II, LLC, and Tecogen Inc., dated May 14, 2008 (incorporated by reference to Exhibit 10.8 to the Company's Form S-1, as amended, originally filed with the SEC

on December 22, 2011).

10.8* Form of Demand Note Agreement with John Hatsopoulos (incorporated by reference to Exhibit 10.9 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).

10.9 Form of Sales Representative Agreement (incorporated by reference to Exhibit 10.10 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).

Table of Contents
TECOGEN INC.

10.10+	Asset Purchase Agreement with Danotek (assignment for the benefit of creditors), LLC, dated January 8, 2013 (incorporated by reference to Exhibit 10.11 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.11+	Exclusive License Agreement between Tecogen Inc. and the Wisconsin Alumni Research Foundation, dated February 5, 2007 (incorporated by reference to Exhibit 10.12 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.12+	Grant Award Number PIR-08-022, dated July 2, 2009 (incorporated by reference to Exhibit 10.13 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.13+	Sales Representative Agreement between American DG Energy Inc. and Ilios Dynamics, dated October 20, 2009 (incorporated by reference to Exhibit 10.14 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).
10.14	First Amendment to the Sales Representative Agreement between American DG Energy Inc. and Ilios Inc., dated November 12, 2013 (incorporated by reference to Exhibit 10.2 to the Company’s Form 10-Q for the quarter ended September 30, 2013, originally filed with the SEC on November 14, 2013).
10.15	Revolving Line of Credit Agreement between Tecogen Inc. and John N. Hatsopoulos, dated March 25, 2013 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K, originally filed with the SEC on May 2, 2013).
10.16	First Amendment to the Revolving Line of Credit Agreement between Tecogen Inc. and John N. Hatsopoulos, dated August 13, 2013 (incorporated by reference to Exhibit 10.2 to the Company’s Form 10-Q for the quarter ended June 30, 2013, originally filed with the SEC on August 14, 2013).
10.17	Form of Common Stock Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K, originally filed with the SEC on October 21, 2013).
10.18	Form of Common Stock Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Company’s Forms 8-K, originally filed with the SEC on November 8, 2013 and November 13, 2013).
10.19	Demand Promissory Note between John N. Hatsopoulos and Tecogen Inc., dated October 3, 2013 (incorporated by reference to Exhibit 10.3 to the Company’s Form 10-Q for the quarter ended September 30, 2013, originally filed with the SEC on November 14, 2013).
10.20	Senior Convertible Promissory Note issued to Michaelson Capital Special Finance Fund LP, dated December 23, 2013 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K, originally filed with the SEC on December 30, 2013).
10.21#	Collective Bargaining Agreement, dated February 25, 2014, between Tecogen, Inc. and International Union of Operating Engineers, Local 68, 68A, 68B.
10.22#	Revolving Line of Credit Agreement between Tecogen Inc. and John N. Hatsopoulos, dated March 26, 2014
14.1	Code of Business Conduct and Ethics (incorporated by reference to Exhibit 14.1 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).

21.1 List of subsidiaries (incorporated by reference to Exhibit 21.1 to the Company's Form S-1, as amended, originally filed with the SEC on December 22, 2011).

23.1# Consent of McGladrey LLP.

31.1# Rule 13a-14(a) Certification of Chief Executive Officer.

31.2# Rule 13a-14(a) Certification of Chief Financial Officer.

32.1# Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer (Furnished herewith).

Table of Contents
TECOGEN INC.

101.1	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2013 formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Stockholders' Equity, (iv) the Consolidated Statements of Cash Flows, and (v) related notes to these financial statements, tagged as blocks of text and in detail (Furnished herewith).

#Filed herewith.
*Management contract or compensatory plan or arrangement.
+Previously filed with the Securities and Exchange Commission as an Exhibit to the Company's Form S-1, as amended. Confidential Treatment has been granted for portions of this document. The confidential portions were omitted and filed separately, on a confidential basis, with the Securities and Exchange Commission.

Table of Contents
TECOGEN INC.

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.

TECOGEN INC.
(Registrant)

By: /s/ John N. Hatsopoulos
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Bonnie J. Brown
Chief Financial Officer, Treasurer and Secretary
(Principal Financial and Accounting Officer)

Dated: March 31, 2014

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 capacity and on the dates indicated.

Signature	Title	Date
/s/ Angelina M. Galiteva Angelina M. Galiteva	Chairman of the Board	March 31, 2014
/s/ John N. Hatsopoulos John N. Hatsopoulos	Director and Chief Executive Officer (Principal Executive Officer)	March 31, 2014
/s/ Bonnie J. Brown Bonnie J. Brown	Chief Financial Officer, Treasurer and Secretary Principal Financial and Accounting Officer)	March 31, 2014
/s/ George N. Hatsopoulos George N. Hatsopoulos	Director	March 31, 2014
/s/ Charles T. Maxwell Charles T. Maxwell	Director	March 31, 2014
/s/ Ahmed F. Ghoniem Ahmed F. Ghoniem	Director	March 31, 2014
/s/ Joseph E. Aoun Joseph E. Aoun	Director	March 31, 2014

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of

Tecogen Inc.

We have audited the accompanying consolidated balance sheets of Tecogen Inc. as of December 31, 2013 and 2012, and the related consolidated statements of operations, stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, 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 Tecogen Inc. as of December 31, 2013 and 2012, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ McGladrey LLP
McGladrey LLP

Boston, Massachusetts
March 31, 2014

TECOGEN INC.

CONSOLIDATED BALANCE SHEETS
As of December 31, 2013 and 2012

	2013	2012
ASSETS		
Current assets:		
Cash and cash equivalents	$7,713,899	$1,572,785
Short-term investments, restricted	—	181,859
Accounts receivable, net	3,740,885	2,700,243
Unbilled revenue	646,398	—
Inventory, net	3,343,793	3,356,622
Due from related party	—	55,837
Deferred financing costs	140,433	—
Prepaid and other current assets	340,013	402,846
Total current assets	15,925,421	8,270,192
Property, plant and equipment, net	638,026	435,612
Intangible assets, net	953,327	372,020
Goodwill	40,870	—
Other assets	72,425	39,425
TOTAL ASSETS	$17,630,069	$9,117,249
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Demand notes payable and line of credit, related party	$2,950,000	$1,337,500
Senior convertible promissory note, related party	3,000,000	—
Current portion of convertible debentures, related party	—	90,967
Accounts payable	2,338,046	1,151,010
Accrued expenses	1,139,554	807,922
Deferred revenue	613,915	677,919
Due to related party	119,667	—
Interest payable, related party	198,450	126,170
Total current liabilities	10,359,632	4,191,488
Long-term liabilities:		
Deferred revenue, net of current portion	204,544	142,726
Total liabilities	10,564,176	4,334,214
Commitments and contingencies (Note 8)		
Stockholders' equity:		
Tecogen Inc. stockholders' equity:		
Common stock, $0.001 par value; 100,000,000 shares authorized; 15,155,200 and 13,611,974 issued and outstanding at December 31, 2013 and 2012, respectively	15,155	13,612
Additional paid-in capital	22,463,996	16,360,821
Accumulated deficit	(15,209,212)	(11,759,723)
Total Tecogen Inc. stockholders' equity	7,269,939	4,614,710
Noncontrolling interest	(204,046)	168,325
Total stockholders' equity	7,065,893	4,783,035

TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$17,630,069	$9,117,249

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

TECOGEN INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
For the Years Ended December 31, 2013 and 2012

	2013	2012
Revenues		
Products	$6,346,050	$7,453,222
Services	9,503,819	7,800,750
	15,849,869	15,253,972
Cost of sales		
Products	4,709,767	5,290,535
Services	6,109,974	4,098,363
	10,819,741	9,388,898
Gross profit	5,030,128	5,865,074
Operating expenses		
General and administrative	7,018,133	6,643,120
Selling	1,423,587	1,225,580
Aborted public offering costs	258,512	—
	8,700,232	7,868,700
Loss from operations	(3,670,104)	(2,003,626)
Other income (expense)		
Interest and other income	3,958	48,397
Interest expense	(141,065)	(71,208)
	(137,107)	(22,811)
Loss before income taxes	(3,807,211)	(2,026,437)
Consolidated net loss	(3,807,211)	(2,026,437)
Less: Loss attributable to the noncontrolling interest	357,722	389,480
Net loss attributable to Tecogen Inc.	$(3,449,489)	$(1,636,957)
Net loss per share - basic and diluted	$(0.26)	$(0.12)
Weighted average shares outstanding - basic and diluted	13,385,155	13,135,071

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

TECOGEN INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
For the Years Ended December 31, 2013 and 2012

	Tecogen Inc. Common Stock 0.001 Par Value	Additional Paid-In Capital	Common Stock Subscription	Shareholder Receivable	Accumulated Deficit	Noncontrolling Interest	Total
Balance at December 31, 2011	$13,498	$15,527,271	$ —	$(345,000)	$(10,122,766)	$ 150,161	$5,223,164
Sale of subsidiary common stock	—	289,606	—	—	—	210,394	500,000
Purchase of subsidiary common stock	—	(174,958)	—	—	—	174,958	—
Sale of common stock	213	679,787	—	—	—	—	680,000
Conversion of related party convertible notes to common stock	83	99,917	—	—	—	—	100,000
Conversion of accrued interest on related party convertible notes to common stock	2	6,098	—	—	—	—	6,100
Settlement of shareholder receivable (Note 10)	(100)	(239,900)	—	345,000	—	—	105,000
Purchase of restricted stock	(84)	(253)	—	—	—	—	(337)
Stock based compensation expense	—	173,253	—	—	—	22,292	195,545
Net loss	—	—	—	—	(1,636,957)	(389,480)	(2,026,437)
Balance at December 31, 2012	13,612	16,360,821	—	—	(11,759,723)	168,325	4,783,035
Sale of common stock	1,477	5,965,328	—	—	—	—	5,966,805
Conversion of related party convertible notes to common stock	76	90,891	—	—	—	—	90,967
Conversion of accrued interest on related party convertible notes to common stock	3	11,277	—	—	—	—	11,280
Exercise of stock options	25	2,975	—	—	—	—	3,000
Forfeiture and repurchase of restricted stock grant	(38)	(112)	—	—	—	(200)	(350)
Stock based compensation expense (forfeiture)	—	32,816	—	—	—	(14,449)	18,367
Net loss	—	—	—	—	(3,449,489)	(357,722)	(3,807,211)
Balance at December 31, 2013	$15,155	$22,463,996	$ —	$—	$(15,209,212)	$ (204,046)	$7,065,893

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

TECOGEN INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2013 and 2012

	2013	2012
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(3,807,211)	$(2,026,437)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	256,459	203,775
Provision for losses on accounts receivable	50,600	57,600
Provision (recovery) for inventory reserve	(32,000)	(26,800)
Stock-based compensation	18,367	195,545
Changes in operating assets and liabilities		
(Increase) decrease in:		
Short-term investments, restricted	(202)	(4,776)
Accounts receivable	(1,091,242)	(1,358,611)
Inventory	62,229	(760,836)
Unbilled revenue	(646,398)	—
Due from related party	55,837	243,902
Prepaid expenses and other current assets	62,833	(290,130)
Other assets	(33,000)	(4,000)
Increase (decrease) in:		
Accounts payable	1,187,036	338,796
Accrued expenses	331,632	80,459
Deferred revenue	(2,186)	127,523
Interest payable, related party	83,560	71,208
Due to related party	119,667	—
Net cash used in operating activities	(3,384,019)	(3,152,782)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(202,700)	(219,711)
Purchases of intangible assets	(397,950)	(164,296)
Cash paid for asset acquisition	(497,800)	—
Maturities of short-term investments	182,061	506,345
Net cash provided by (used in) investing activities	(916,389)	122,338
CASH FLOWS FROM FINANCING ACTIVITIES:		
Payments made on demand notes payable, related party	(37,500)	—
Proceeds from payments on receivable from shareholder	—	105,000
Proceeds from issuance of demand notes payable and line of credit, related party	1,650,000	300,000
Proceeds from sale of common stock, net of costs	5,966,805	680,000
Proceeds from exercise of stock options	3,000	—
Proceeds from issuance of senior convertible promissory note	3,000,000	—
Payments from debt issuance costs	(140,433)	—
Purchase of restricted stock	(350)	(337)
Proceeds from sale of subsidiary common stock	—	500,000
Net cash provided by financing activities	10,441,522	1,584,663
Net increase (decrease) in cash and cash equivalents	6,141,114	(1,445,781)
Cash and cash equivalents, beginning of the year	1,572,785	3,018,566
Cash and cash equivalents, end of the year	$7,713,899	$1,572,785
Supplemental disclosures of cash flows information:		
Cash paid for interest	$55,639	$—

Non-cash investing and financing activities:		
Conversion of accrued convertible debenture interest into common stock	$11,280	$6,100
Conversion of related party notes to common stock	$90,967	$100,000
Settlement of shareholder receivable	$—	$240,000

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

TECOGEN INC.

Notes to Audited Consolidated Financial Statements

Note 1 – Nature of business and operations

Tecogen Inc. (the "Company") (a Delaware Corporation) was organized on November 15, 2000, and acquired the assets and liabilities of the Tecogen Products division of Thermo Power Corporation. The Company produces commercial and industrial, natural-gas-fueled engine-driven, combined heat and power (CHP) products that reduce energy costs, decrease greenhouse gas emissions and alleviate congestion on the national power grid. Tecogen's products supply electric power or mechanical power for cooling, while heat from the engine is recovered and purposefully used at a facility. The majority of Company's customers are located in regions with the highest utility rates, typically California, the Midwest and the Northeast.

On May 4, 2009 the Company invested $8,400 in exchange for 8,400,000 shares of a newly established corporation Ilios Inc., or Ilios. The investment gave the Company a controlling financial interest in Ilios, whose business focus is advanced heating systems for commercial and industrial applications. On May 11, 2009 the Company sold 1,400,000 shares in Ilios at $0.50 per share to two of its existing stockholders in exchange for the extinguishment of $700,000 in demand notes payable, convertible debentures and accrued interest (see Note 7 – Demand notes payable and convertible debentures – related party). On July 24, 2009, Ilios sold 2,710,000 shares of common stock to accredited investors at $0.50 per share and raised $1,352,500. On June 3, 2011, Ilios sold 500,000 shares of common stock to Tecogen at $0.50 per share and raised $250,000 and on December 29, 2011, Ilios sold 1,000,000 shares of common stock to Tecogen at $0.50 per share and raised $500,000. On January 19, 2012, Ilios sold 1,000,000 shares of common stock to an accredited investor and raised $500,000. On December 28, 2012, Ilios sold 1,000,000 shares of common stock to Tecogen at $0.50 per share and raised $500,000. As of December 31, 2013 the Company owns a 65.0% interest in Ilios and has consolidated Ilios into its financial statements.

The accompanying consolidated financial statements include the accounts of the Company and its majority owned subsidiary Ilios, whose business focus is on advanced heating systems for commercial and industrial applications. With the inclusion of unvested restricted stock awards, the Company owns 63.7% of Ilios.

The Company's operations are comprised of one business segment. Our business is to manufacture and support highly efficient CHP products based on engines fueled by natural gas.

Note 2 – Summary of significant accounting policies

Principles of Consolidation and Basis of Presentation

The financial statements have been prepared in accordance with accounting standards set by the Financial Accounting Standards Board (FASB). The FASB sets generally accepted accounting principles (GAAP) to ensure financial condition, results of operations, and cash flows are consistently reported. References to GAAP issued by the FASB in these footnotes are to the FASB Accounting Standards Codification (ASC). The Company adopted the presentation requirements for noncontrolling interests required by ASC 810 Consolidation. Under ASC 810, earnings or losses attributed to the noncontrolling interests are reported as part of the consolidated earnings and not a separate component of income or expense. Noncontrolling interests in the net assets and operations of Ilios are reflected in the caption "Noncontrolling interest" in the accompanying consolidated financial statements. All intercompany transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires 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.

Concentration of Credit Risk

The Company's financial instruments that are exposed to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. The Company maintains its cash balances in bank accounts, which at times may exceed the Federal Deposit Insurance Corporation's ("FDIC") general deposit insurance limits. The amount on deposit at December 31, 2013 and 2012 which exceeded the $250,000 federally insured limit was approximately $7,410,000 and $1,070,000, respectively. The Company has not experienced any losses in such accounts and thus believes that it is not exposed to any significant credit risk on cash and cash equivalents.

TECOGEN INC.

There was one customer who represented more than 10% of revenues for the year ended December 31, 2012. The Company has no customers who represented 10% of revenues for the year ended December 31, 2013. Included in trade accounts receivable are amounts from one customer who represents 22% of the accounts receivable balance as of December 31, 2013 and another customer who represented 16% of the accounts receivable balance as of December 31, 2012.

Cash and Cash Equivalents

The Company considers all highly liquid instruments with an original maturity date, at date of purchase, of three months or less to be cash and cash equivalents.

Short-Term Investments

Short-term investments consist of certificates of deposit with maturities of greater than three months but less than one year. Certificates of deposits approximate fair value, based on estimates using current market rates offered for deposits with similar remaining maturities.

On October 26, 2011, the Company entered into an agreement with Digital Energy Corp., a customer of the Company, whereby the Company provided a letter of credit in the amount of $180,000, for the benefit of Digital Energy Corp., to satisfy a requirement of the New York Independent System Operator, Inc. A certificate of deposit for $180,000 secures the letter of credit. In exchange for providing this letter of credit, Digital Energy Corp. provided a promissory note to the Company for $180,000, with interest at 6%, payable in monthly installments of interest only. Principal would only be owed if the letter of credit was drawn upon and would become due and payable on the first anniversary date of the note. On February 19, 2013, this letter of credit was cancelled and the certificate of deposit was released from restriction and sold.

On June 13, 2011, the Southern California Gas Company entered into an agreement with the Company to invest $500,000 in the Company’s Common Stock. The agreement included certain stockholder rights and a redemption right whereby the investor may redeem the shares for cash until the earlier of, the initiation of a public offering of the Company by filing a registration statement with the SEC, or 5 years. A letter of credit, secured by a Certificate of Deposit, for the amount of the investment had been put in place to satisfy the contingency of the redemption right. Since the Company filed a registration statement with the Securities and Exchange Commission on December 23, 2011 the redemption right was no longer valid. The Certificate of Deposit was converted to cash in 2012.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. An allowance for doubtful accounts is provided for those accounts receivable considered to be uncollectible based upon historical experience and management’s evaluation of outstanding accounts receivable at the end of the year. Bad debts are written off against the allowance when identified. At December 31, 2013 and 2012 the allowance for doubtful accounts was $103,800 and $154,400, respectively.

Inventory

Raw materials, work in process, and finished goods inventories are stated at the lower of cost, as determined by the average cost method, or market. The Company periodically reviews inventory quantities on hand for excess and/or obsolete inventory based primarily on historical usage, as well as based on estimated forecast of product demand. Any reserves that result from this review are charged to cost of sales.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Depreciation is provided using the straight-line method over the estimated useful lives of the asset, which range from three to fifteen years. Leasehold improvements are amortized using the straight-line method over the lesser of the estimated useful lives of the assets or the term of the related leases. Expenditures for maintenance and repairs are expensed currently, while renewals and betterments that materially extend the life of an asset are capitalized.

TECOGEN INC.

Intangible Assets

Intangible assets subject to amortization include costs incurred by the Company to acquire product certifications, certain patent costs and developed technologies. These costs are amortized on a straight-line basis over the estimated economic life of the intangible asset. The Company reviews intangible assets for impairment when the circumstances warrant.

Goodwill

The Company's goodwill was recorded as a result of the Company's asset acquisition discussed in Note 15. The Company has recorded this transaction using the acquisition method of accounting. The Company tests its recorded goodwill for impairment as of the last day of the year, or more often if indicators of potential impairment exist, by determining if the carrying value of the Company's single reporting unit exceeds its estimated fair value. Factors that could trigger an interim impairment test include, but are not limited to, underperformance relative to historical or projected future operating results, significant changes in the manner of use of the acquired assets or the Company's overall business, significant negative industry or economic trends and a sustained period where market capitalization, plus an appropriate control premium, is less than stockholders' equity.

The Company's impairment test involves a two-step process. In the first step, the Company compares the fair value of the reporting unit to its carrying value. If the fair value of the reporting unit exceeds its carrying value, goodwill is not impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value, the Company must perform the second step of the impairment test to measure the amount of impairment loss, if any. In the second step, the reporting unit's fair value is allocated to all of the assets and liabilities of the reporting unit, including any unrecognized intangible assets, in a hypothetical analysis that calculates the implied fair value of goodwill in the same manner as if the reporting unit was being acquired in a business combination. If the implied fair value of the reporting unit's goodwill is less than the carrying value, the difference is recorded as an impairment loss. As of December 31, 2013, the Company determined that the fair value of the reporting unit exceeded its carrying value and therefore the second step was not necessary and no impairment was recognized.

Common Stock

The Company's common stock was split one-for-four in a reverse stock split effective July 22, 2013. The effect of this reverse stock split has been retroactively applied to per share data and common stock information.

Impairment of long-lived assets

Long-lived assets, including intangible assets and property and equipment, are evaluated for impairment whenever events or changes in circumstances have indicated that an asset may not be recoverable and are grouped with other assets to the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. If the sum of the projected undiscounted cash flows (excluding interest charges) is less than the carrying value of the assets, the assets will be written down to the estimated fair value and such loss is recognized in income from continuing operations in the period in which the determination is made. Management determined that no impairment of long-lived assets existed as of December 31, 2013.

Off Balance Sheet Arrangements

On July 22, 2013, the Company’s Chief Executive Officer personally pledged to support a bank credit facility of $1,055,000 to support bank guarantees issued on certain construction contracts.
Loss per Common Share

The Company computes basic loss per share by dividing net loss for the period by the weighted-average number of shares of Common Stock outstanding during the period. The Company computes its diluted earnings per common share using the treasury stock method. For purposes of calculating diluted earnings per share, the Company considers its shares issuable in connection with the convertible debentures, stock options and warrants to be dilutive Common Stock equivalents when the exercise/conversion price is less than the average market price of our Common Stock for the period. All shares issuable for the years ended December 31, 2013 and 2012 were anti-dilutive because of the reported net loss.

TECOGEN INC.

Other Comprehensive Net Loss

The comprehensive net loss for the years ended December 31, 2013 and 2012 does not differ from the reported loss.

Segment Information

The Company reports segment data based on the management approach. The management approach designates the internal reporting that is used by management for making operating and investment decisions and evaluating performance as the source of the Company's reportable segments. The Company uses one measurement of profitability and does not disaggregate its business for internal reporting. The Company has determined that it operates in one business segment which manufactures and supports highly efficient CHP products based on engines fueled by natural gas. All of the Company’s long lived assets reside in the United States of America. All of the Company’s revenue is generated in the United States of America.

The following table summarizes net revenue by product line and services for the years ended December 31, 2013 and 2012:

	2013	2012
Products:		
Cogeneration	$5,199,649	$5,791,412
Chiller	1,146,401	1,661,810
Total Product Revenue	6,346,050	7,453,222
Services		
Service contracts	7,071,388	7,089,491
Installations	2,432,431	711,259
Total Service Revenue	9,503,819	7,800,750
	$15,849,869	$15,253,972

Income Taxes

The Company uses the asset and liability method of accounting for income taxes. The current or deferred tax consequences of transactions are measured by applying the provisions of enacted tax laws to determine the amount of taxes payable currently or in future years. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities and expected future tax consequences of events that have been included in the financial statements or tax returns using enacted tax rates in effect for the years in which the differences are expected to reverse. Under this method, a valuation allowance is used to offset deferred taxes if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets may not be realized. Management evaluates the recoverability of deferred taxes and the adequacy of the valuation allowance annually.

The Company has adopted the provisions of the accounting standards relative to accounting for uncertainties in tax positions. These provisions provide guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. The Company elected to recognize interest and penalties related to income tax matters as a component of income tax expense in the statements of operations. There was no impact on the financial statements as a result of this guidance.

With few exceptions, the Company is no longer subject to possible income tax examinations by federal, state or local taxing authorities for tax years before 2009, with the exception of loss carryforwards in the event they are utilized in future years. The Company's tax returns are open to adjustment from 2001 forward, as a result of the fact that the

Company has loss carryforwards from those years, which may be adjusted in the year those losses are utilized.

TECOGEN INC.

Fair Value of Financial Instruments

The Company's financial instruments are cash and cash equivalents, certificates of deposit, accounts receivable, accounts payable, demand notes, line of credit and convertible debentures due to related parties. The recorded values of cash and cash equivalents, accounts receivable and accounts payable approximate their fair values based on their short-term nature. At December 31, 2013, the recorded value on the consolidated balance sheet of the debentures approximates fair value as the terms approximate those available for similar instruments. Certificates of deposits are classified as short-term investments and approximate fair value, based on estimates using current market rates offered for deposits with similar remaining maturities.

Revenue Recognition

Revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or determinable and collectability is reasonably assured. Generally, sales of cogeneration and chiller units and parts are recognized when shipped and services are recognized over the term of the service period. Payments received in advance of services being performed are recorded as deferred revenue.

Infrequently, the Company recognizes revenue in certain circumstances before delivery has occurred (commonly referred to as bill and hold transactions). In such circumstances, among other things, risk of ownership has passed to the buyer, the buyer has made a written fixed commitment to purchase the finished goods, the buyer has requested the finished goods be held for future delivery as scheduled and designated by them, and no additional performance obligations exist by the Company. For these transactions, the finished goods are segregated from inventory and normal billing and credit terms granted. For the years ended December 31, 2013 and 2012 no revenues were recorded as bill and hold transactions.

For those arrangements that include multiple deliverables, the Company first determines whether each service or deliverable meets the separation criteria of FASB ASC 605-25, Revenue Recognition—Multiple-Element Arrangements. In general, a deliverable (or a group of deliverables) meets the separation criteria if the deliverable has stand-alone value to the customer and, if the arrangement includes a general right of return, delivery or performance of the undelivered item(s) is considered probable and substantially in control of the Company. Each deliverable that meets the separation criteria is considered a separate ‘‘unit of accounting". The Company allocates the total arrangement consideration to each unit of accounting using the relative selling price method. The amount of arrangement consideration that is allocated to a delivered unit of accounting is limited to the amount that is not contingent upon the delivery of another unit of accounting.

When vendor-specific objective evidence or third-party evidence is not available, adopting the relative fair value method of allocation permits the Company to recognize revenue on specific elements as completed based on the estimated selling price. The Company generally uses internal pricing lists that determine sales prices to external customers in determining its best estimate of the selling price of the various deliverables in multiple-element arrangements. Changes in judgments made in estimating the selling price of the various deliverables could significantly affect the timing or amount of revenue recognition. The Company enters into sales arrangements with customers to sell its cogeneration and chiller units and related service contracts and occasionally installation services. Based on the fact that the Company sells each deliverable to other customers on a stand-alone basis, the company has determined that each deliverable has a stand-alone value. Additionally, there are no rights of return relative to the delivered items; therefore, each deliverable is considered a separate unit of accounting.

After the arrangement consideration has been allocated to each unit of accounting, the Company applies the appropriate revenue recognition method for each unit of accounting based on the nature of the arrangement and the services included in each unit of accounting. Cogeneration and chiller units are recognized when shipped and services

are recognized over the term of the applicable agreement, or as provided when on a time and materials basis.

In some cases, our customers may choose to have the Company engineer and install the system for them rather than simply purchase the cogeneration and/or chiller units. In this case, the Company accounts for revenue, or turnkey revenue, and costs using the percentage-of-completion method of accounting. Under the percentage-of-completion method of accounting, revenues are recognized by applying percentages of completion to the total estimated revenues for the respective contracts. Costs are recognized as incurred. The percentages of completion are determined by relating the actual cost of work performed to date to the current estimated total cost at completion of the respective contracts. When the estimate on a contract indicates a loss, the Company's policy is to record the entire expected loss, as required by generally accepted accounting principles. The excess of contract costs and profit recognized to date on the percentage-of-completion accounting method in excess of billings is recorded as unbilled revenue. Billings in excess of related costs and estimated earnings are recorded as deferred revenue.

TECOGEN INC.

Presentation of Sales Taxes

The Company reports revenues net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions.

Shipping and Handling Costs

The Company classifies freight billed to customers as sales revenue and the related freight costs as cost of sales.

Advertising Costs

The Company expenses the costs of advertising as incurred. For the years ended December 31, 2013 and 2012, advertising expense was approximately $242,200 and $187,500, respectively.

Research and Development Costs

Internal research and development expenditures are expensed as incurred. Proceeds from certain grants and contracts with governmental agencies and their contractors to conduct research and development for new CHP technologies or to improve or enhance existing technology is recorded as an offset to the related research and development expenses. These grants and contracts are paid on a cost reimbursement basis provided in the agreed upon budget. Amounts received totaled $127,500 and $126,500 in fiscal years 2013 and 2012, respectively, which offset the Company’s total research and development expenditures of approximately $867,000 and $431,000 for each of the years ended December 31, 2013 and 2012, respectively, which are included in general and administrative expenses in the accompanying consolidated statements of operations.

Stock-Based Compensation

Stock-based compensation cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as an expense in the statements of operations over the requisite service period.

The determination of the fair value of share-based payment awards is affected by the Company’s stock price. Since the Company was not publicly traded when the awards were issued, the Company considered the sales price of the Common Stock in private placements to unrelated third parties as a measure of the fair value of its Common Stock.

The Company utilizes an estimated forfeiture rate when calculating the expense for the period. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock-based compensation expense recognized is based on awards that are ultimately expected to vest. The Company evaluates the assumptions used to value awards regularly and if factors change and different assumptions are employed, stock-based compensation expense may differ significantly from what has been recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, the Company may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.

Pursuant to ASC 505-50, Equity Based Payments to Non-Employees, the fair value of restricted Common Stock and stock options issued to nonemployees is revalued at each reporting period until the ultimate measurement date, as defined by ASC 505-50. The Company records the value of the instruments at the time services are provided and the instruments vest. Accordingly, the ultimate expense is not fixed until such instruments are fully vested.

Reclassifications

Certain prior period balances have been reclassified to conform with current period presentation. As a result of a four-for-one reverse stock split which took place during the year, a reclassification of $40,836 from common stock to additional paid in capital was retroactively applied to the balances as of December 31, 2012. Also, installation revenue is broken out in the schedule of net revenue by product line and services above; in the prior year this revenue was included in services.

Note 3 – Loss per common share:

Basic and diluted earnings per share for the years ended December 31, 2013 and 2012, respectively, were as follows:

	2013	2012
Loss available to stockholders	$(3,449,489)	$(1,636,957)
Weighted average shares outstanding - Basic and diluted	13,385,155	13,135,071
Basic and diluted loss per share	$(0.26)	$(0.12)
Anti-dilutive shares underlying stock options outstanding	1,148,000	1,096,500
Anti-dilutive convertible debentures	555,556	75,806

Note 4 – Inventory

Inventories at December 31, 2013 and 2012 consisted of the following.

	2013	2012
Gross raw materials	$3,539,732	$3,574,620
Less - reserves	(300,000)	(332,000)
Net raw materials	3,239,732	3,242,620
Work-in-process	104,061	114,002
Finished goods	—	—
	$3,343,793	$3,356,622

Note 5 – Intangible assets other than goodwill

The Company capitalized $171,224 and $17,314 of product certification costs during the years ended December 31, 2013 and 2012, respectively. Also included in intangible assets are the costs incurred by the Company to acquire certain patents. These patents, once in service, will be amortized on a straight-line basis over the estimated economic life of the associated product, which range from approximately 7-10 years. The Company capitalized $226,726 and $146,981 of patent-related costs during the years ended December 31, 2013 and 2012, respectively. The Company also capitalized $240,000 certain developed technology in connection with an asset acquisition which is being amortized over its useful life of fifteen years. Intangible assets at December 31, 2013 and 2012 consist of the following:

	Product Certifications	Patents	Developed Technology	Total
Balance at December 31, 2013				
Intangible assets	$406,706	$441,609	240,000	$1,088,315
Less - accumulated amortization	(83,405)	(39,583)	(12,000)	(134,988)
	$323,301	$402,026	$228,000	$953,327
Balance at December 31, 2012				
Intangible assets	$235,482	$214,883	—	$450,365
Less - accumulated amortization	(57,798)	(20,547)	—	(78,345)
	$177,684	$194,336	$—	$372,020

TECOGEN INC.

Amortization expense was $56,643 and $33,896 during the years ended December 31, 2013 and 2012, respectively. Estimated amortization expense at December 31, 2013 for each of the five succeeding years is as follows:

2014	$80,937
2015	119,758
2016	119,758
2017	119,758
2018	113,560
Thereafter	399,556
	$953,327

Note 6 – Property and equipment

Property and equipment at December 31, 2013 and 2012 consisted of the following:

	Estimated Useful Life (in Years)	2013	2012
Machinery and equipment	5 - 7 years	$773,894	$478,290
Furniture and fixtures	5 years	79,612	54,058
Computer software	3 - 5 years	67,215	56,935
Leasehold improvements	*	397,158	326,366
		1,317,879	915,649
Less - accumulated depreciation and amortization		(679,853)	(480,037)
Net property, plant and equipment		$638,026	$435,612

* Lesser of estimated useful life of asset or lease term

Depreciation and amortization expense on property and equipment for the years ended December 31, 2013 and 2012 was $199,816 and $169,879, respectively. Estimated depreciation expense at December 31, 2013 for each of the five succeeding years is as follows:

2014	$171,691
2015	130,287
2016	105,792
2017	79,616
2018	52,851
Thereafter	97,789
	$638,026

Note 7 – Demand notes payable, convertible debentures and line of credit

Demand notes payable to related parties consist of various demand notes outstanding to stockholders totaling $1,750,000 and $1,337,500 at December 31, 2013 and 2012, respectively. The primary lender is John N. Hatsopoulos, the company’s Chief Executive Officer, who holds $1,750,000 and $1,300,000 of the demand notes as of December 31, 2013 and 2012, respectively. The demand notes accrue interest annually at rates ranging from 5% to 6%. Unpaid principal and interest on the demand notes is due upon demand by the lender. On January 6, 2014, the Company repaid the then outstanding principal balance of $1,750,000 together with accrued interest of $175,311.

On September 24, 2001, the Company entered into subscription agreements with three investors for the sale of convertible debentures in the aggregate principal amount of $330,000. The primary investors were George N.

Hatsopoulos, a member of the board of directors, who subscribed for $200,000 of the debentures and John N. Hatsopoulos, the Company's Chief Executive Officer, who subscribed for $100,000 of the debentures. The debentures accrue interest at a rate of 6% per

annum and are due six years from issuance date. The debentures are convertible, at the option of the holder, into a number of shares of Common Stock as determined by dividing the original principal amount plus accrued and unpaid interest by a conversion price of $1.20. On September 24, 2011 the remaining holders of the Company's convertible debentures agreed to amend the terms of the debentures and extend the due date from September 24, 2011 to September 24, 2013.

On May 11, 2009 the Company sold 1,400,000.00 shares in Ilios at $0.50 per share to George Hatsopoulos and John Hatsopoulos in exchange for the extinguishment of $427,432 in demand notes payable, $109,033 in convertible debentures and $163,535 in accrued interest. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

On September 30, 2009, Joseph J. Ritchie elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 37,028 shares of Common Stock at a conversion price of $1.20 per share.

On September 30, 2012, certain holders of the debentures converted the principal amount of $100,000 and accrued interest in the amount of $6,100 into 85,242 shares of the Company's Common Stock. At December 31, 2012 there were 75,806 shares of common stock issuable upon conversion of the Company's outstanding convertible debentures. At December 31, 2012, the principal amount of the Company's convertible debentures was $90,967 which was due on September 24, 2013.

On October 18, 2013, the remaining holder of the debentures, George N. Hatsopoulos, converted the principal balance of $90,967 into 75,806 shares of the Company's common stock at a conversion price of $1.20 per share. In addition, Mr. Hatsopoulos requested that the accrued interest earned in 2012 in the amount of $6,913 be converted into 2,161 shares of the Company's common stock at a conversion price of $3.20 per share and that the accrued interest earned on or after January 1, 2013 in the amount of $4,367 be converted into 970 shares of the Company's common stock at a conversion price of $4.50 per share.

On March 25, 2013, the Company entered into a Revolving Line of Credit Agreement, or the Credit Agreement, with John N. Hatsopoulos, our Chief Executive Officer. Under the terms of the Credit Agreement, as amended on August 13, 2013, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of $1,500,000 from time to time, at the written request of the Company. Any amounts borrowed by the Company pursuant to the Credit Agreement will bear interest at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Repayment of the principal amount borrowed pursuant to the Credit Agreement will be due on March 1, 2014. In addition, the company may prepay accrued interest, provided that prepayment may not be made prior to January 1, 2014.The Credit Agreement terminated on March 1, 2014. As of December 31, 2013 the Company has borrowed $1,200,000 pursuant to the Credit Agreement. On January 6, 2014, the Company repaid the then outstanding principal balance of $1,200,000 together with accrued interest of $25,347.

On December 23, 2013, the company entered into a Senior Convertible Promissory Note (the "Note") with Michaelson Capital Special Finance Fund LP, ("Michaelson"), for the principal amount of $3,000,000 with interest at 4% per annum for a term of three years. In the event of default such interest rate shall accrue at 8% after the occurrence of the event of default and during continuance plus 2% after the occurrence and during the continuance of any other event of default. The Note is a senior unsecured obligation which pays interest only on a monthly basis in arrears at a rate of 4% per annum, unless earlier converted in accordance with the terms of the agreement prior to such date. The principal amount, if not converted, is due on the third anniversary of the Note, December 31, 2016. The Note is senior in right of payment to any unsecured indebtedness that is expressly subordinated in right of payment to the Note.

The principal balance of the Note, together with any unpaid interest, is convertible into shares of the Company's common stock at 185.19 shares of our common stock per $1,000 principal amount of Note (equivalent to a conversion price of $5.40 per share) at the option of Michaelson. If at any time the common stock of the Company is (1) trading on a national securities exchange, (2) qualifies for unrestricted resale under federal securities laws and (3) the arithmetic average of the volume weighted average price of the Common Stock for the twenty consecutive trading days preceding the Company's notice of mandatory conversion exceeds $150,000, the Company shall have the right to require conversion of all of the then outstanding principal balance together with unpaid interest of this Note into the Company's common stock based on the conversion price of $5.40 per share.

The Company may prepay all of the outstanding principal and interest due and payable under this Note in full, at any time prior to the maturity date for an amount equal to 120% of the then outstanding principal and interest due and payable as of the date of such prepayment.

TECOGEN INC.

Upon change of control, as defined by the Note, at Michaelson's option, the obligations may be assumed, on the terms and conditions in this Note, through an assignment and assumption agreement, or the Company may prepay all of the then outstanding principal and unpaid interest under this Note in full at the optional 120% prepayment amount. This provision creates an embedded derivative in accordance with ASC 815, Derivatives and Hedging. As such it is required to be bifurcated and accounted for separately from the Note. However, the Company has determined that the fair value of the embedded derivative is immaterial to the financial statements.

Debt issuance costs of $140,433 are being amortized to interest expense over the term of the Note using the effective interest method. At December 31, 2013, there were 555,556 shares of common stock issuable upon conversion of the Company’s outstanding convertible debentures.

Michaelson has the option to call the Note upon an event of default at the optional 120% prepayment amount discussed above. One event of default is defined as the Company’s failure to issue a registration statement covering the resale of the Company’s Common Stock that is declared effective within one year of the funding date of the Note. The Company has classified this Note as current on the accompanying consolidated balance sheet due to this event of default as the company cannot control when the registration statement, originally filed on February 6, 2014, will become effective. Additionally, the Note contains a contingent interest clause in connection with events of default, including this event of default. This registration rights provision is not indexed to credit risk, and therefore is not clearly and closely related to the Note. This provision creates an embedded derivative in accordance with ASC 815, Derivatives and Hedging. As such it is required to be bifurcated and accounted for separately from the Note. However, the Company has determined that the fair value of the embedded derivative is immaterial to the financial statements.

While, prior to this transaction, Michaelson was an unrelated party, due to their beneficial ownership percentage of 6.4% after this transaction, Michaelson is now considered a related party.

Note 8 – Commitments and contingencies

Operating Lease Obligations

The Company leases office space and warehouse facilities under various lease agreements which expire through March 2024. The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements, on a calendar year basis (see Note 13 – Related party transactions). Total rent expense for the years ended December 31, 2013 and 2012 amounted to $616,041 and $595,851, offset by $127,784 and $173,898 in rent paid by sub-lessees, to both related and unrelated parties, for a net amount of $488,257 and $421,953.

As of December 31, 2013, the future minimum lease payments receivable on subleases were $51,033 on sub-leases.

The Company leased one service vehicle under a lease agreement which expired January 2012. Vehicle rent expense amounted to $387 during the year ended December 31, 2012.

Future minimum lease payments under all non-cancelable operating leases as of December 31, 2013 consist of the following:

Years Ending December 31,	Amount
2014	$579,495
2015	535,349
2016	485,040
2017	491,920
2018	499,122

2019 and thereafter	2,742,217
Total	$5,333,143

TECOGEN INC.

Letters of Credit

On October 26, 2011, the Company entered into an agreement with Digital Energy Corp., a customer of the Company, whereby the Company provided a letter of credit in the amount of $180,000, for the benefit of Digital Energy Corp., to satisfy a requirement of the New York Independent System Operator, Inc. A certificate of deposit for $180,000 secures the letter of credit. In exchange for providing this letter of credit, Digital Energy Corp. provided a promissory note to the Company for $180,000, with interest at 6%, payable in monthly installments of interest only. Principal would only be owed if the letter of credit was drawn upon and would become due and payable on the first anniversary date of the note. On February 19, 2013 this letter of credit and certificate of deposit restriction were released.

As of December 31, 2013, $583,073 in a letter of credit was outstanding under a revolving bank credit facility needed to collateralize a performance bond on a certain installation project. This revolving bank credit facility expires June 14, 2014. In addition, approximately $1,055,000 in letters of credit were required to collateralize performance bonds on several installation projects. This letter of credit is collateralized by an account owned by John N. Hatsopoulos and expires July 22, 2014. In each case, a performance bond has been furnished on the project and would be drawn upon only in the event that Tecogen fails to complete the project in accordance with the contract.

Legal Proceedings

From time to time the Company may be involved in various claims and other legal proceedings which arise in the normal course of business. Such matters are subject to many uncertainties and outcomes that are not predictable. Based on the information available to the Company and after discussions with legal counsel, the Company does not believe any such proceedings will have a material adverse effect on the business, results of operations, financial position or liquidity.

Note 9 – Product warranty

The Company reserves an estimate of its exposure to warranty claims based on both current and historical product sales data and warranty costs incurred. The majority of the Company’s products carry a one-year warranty. The Company assesses the adequacy of its recorded warranty liability annually and adjusts the amount as necessary. The warranty liability is included in accrued expenses on the accompanying consolidated balance sheets.

Changes in the Company’s warranty reserve were as follows:

Warranty reserve, December 31, 2011	$57,000
Warranty provision for units sold	160,684
Costs of warranty incurred	(127,484)
Warranty reserve, December 31, 2012	90,200
Warranty provision for units sold	179,841
Costs of warranty incurred	(175,041)
Warranty reserve, December 31, 2013	$95,000

TECOGEN INC.

Note 10 – Stockholders' equity

Common Stock

In 2013 and 2012 the Company raised additional funds through private placements of common stock to a limited number of accredited investors. In connection with the 2013 private placements the Company sold an aggregate of 1,476,789 shares of common stock at a purchase price of $4.50 per share. In connection with this private placement the Company incurred commissions, legal fees and various other costs of $678,746 which were offset against the proceeds in additional paid in capital, resulting in net cash proceeds of $5,966,805. In connection with the 2012 private placements the Company sold an aggregate of 212,500 shares of common stock at a purchase price $3.20 per share, resulting in net cash proceeds after commissions and other offering costs of $680,000.

The holders of Common Stock have the right to vote their interest on a per share basis. At December 31, 2013 and 2012 there were 15,156,600 and 13,611,974 shares of Common Stock outstanding, respectively.

Preferred Stock

On February 13, 2013, the authorized preferred stock of 10 million shares, as of December 31, 2013 none of these shares were issued or outstanding.

Receivable from Shareholder

On June 3, 2010 the Company issued a promissory note to an investor in the amount of $345,000. The note was due in full on June 3, 2012 and bears interest at the Bank Prime Rate plus three percent. Accrued interest is paid on a quarterly basis. The note was secured by 287,500 shares of Tecogen Common Stock. The note was repaid with cash of $105,000 and return of 100,000 shares of common stock at a value of $2.40 per share, which were retired by the Company on December 7, 2012.

Stock-Based Compensation

In 2006, the Company adopted the 2006 Stock Option and Incentive Plan (the "Plan"), under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the Company. The Plan was amended at various dates by the board to increase the reserved shares of common stock issuable under the Plan from 1,000,000 to 1,838,750 as of December 31, 2013 (the "Amended Plan").

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Amended Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan cannot be less than the fair market value of the underlying shares on the date of the grant. The number of shares remaining available for future issuance under the Amended Plan as of December 31, 2013 and 2012 was 58,683 and 135,183, respectively.

In 2012, the company granted nonqualified options to purchase an aggregate of 17,500 shares of common stock at $3.20 per share to a director. These options have a vesting schedule of four years and expire in ten years. The fair value of the options issued in 2012 was $20,223. The weighted-average grant date fair value of stock options granted during 2012 was $1.16 per option.

TECOGEN INC.

In 2013, the company granted nonqualified options to purchase an aggregate of 37,500 and 39,000 shares of common stock at $3.20 and $4.50 per share, respectively to certain employees. These options have a vesting schedule of four years and expire in five and ten years, respectively. The fair value of the options issued in 2013 was $80,952. The weighted-average grant date fair value of stock options granted during 2013 was $0.75 and $1.35 per option. Stock option activity for the years ended December 31, 2013 and 2012 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2011	1,095,250	$0.12-$2.80	$1.92	5.53 years	$1,387,150
Granted	17,500	3.20	3.20		
Exercised	—	—	—		
Canceled and forfeited	(15,938)	1.20 - 2.60	1.28		
Expired	(313)	2.60	2.60		
Outstanding, December 31, 2012	1,096,500	$0.12-$3.20	$1.96	4.66 years	$1,356,400
Exercisable, December 31, 2012	662,563		$1.56		$1,096,225
Vested and expected to vest, December 31, 2012	1,096,500		$1.96		$1,356,400
Outstanding, December 31, 2012	1,096,500	$0.12-$3.20	$1.96	4.66 years	$1,356,400
Granted	76,500	3.20-4.50	3.86		
Exercised	(25,000)	0.12	0.12		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2013	1,148,000	$1.20-$4.50	$2.13	5.80 years	$2,721,100
Exercisable, December 31, 2013	799,500		$1.79		$2,166,550
Vested and expected to vest, December 31, 2013	1,148,000		$2.13		$2,721,100

The Company does not expect any forfeitures and the table above represents all stock options expected to vest. The Company uses the Black-Scholes option pricing model to determine the fair value of stock options granted. Use of a valuation model requires management to make certain assumptions with respect to selected model inputs. Expected volatility was calculated based on the average volatility of four comparable publicly traded companies. The average expected life was estimated using the simplified method to determine the expected life based on the vesting period and contractual terms, since it does not have the necessary historical exercise data to determine an expected life for stock options. The Company uses a single weighted-average expected life to value option awards and recognizes compensation on a straight-line basis over the requisite service period for each separately vesting portion of the awards. The risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant.

The weighted average assumptions used in the Black-Scholes option pricing model for options granted in 2013 and 2012 are as follows:

	2013	2012
Stock option awards:		
Expected life	5.63 years	6.25 years
Risk-free interest rate	1.34%	0.70%
Expected volatility	26.5%-36.1%	35.9%-36.0%

TECOGEN INC.

The Company has granted restricted stock awards to its employees and directors. The performance based awards have vesting schedules ranging from 100% 90 days after an initial public offering (IPO) up to 100% one year after an IPO.

Restricted stock activity for the years ended December 31, 2013 and 2012 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2011	483,317	$1.44
Granted	—	—
Vested	—	—
Forfeited	(84,247)	1.36
Unvested, December 31, 2012	399,070	$1.44
Granted	—	—
Vested	—	—
Forfeited	(37,500)	2.60
Unvested, December 31, 2013	361,570	$1.31

During the years ended December 31, 2013 and 2012, the Company recognized stock-based compensation of $59,678 and $136,184, respectively, related to the issuance of stock options and restricted stock. No tax benefit was recognized related to the stock-based compensation recorded during the years. At December 31, 2013 and 2012 there were 361,570 and 399,070 unvested shares of restricted stock outstanding, respectively. At December 31, 2013 and 2012 the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is $124,845 and $183,230, respectively. This amount will be recognized over a weighted average period of 0.56 years.

Stock Based Compensation - Ilios

In 2009, Ilios adopted the 2009 Stock Incentive Plan (the “2009 Plan”) under which the board of directors may grant incentive or non-qualified stock options and stock grants to key employees, directors, advisors and consultants of the company. The maximum number of shares allowable for issuance under the Plan is 2,000,000 shares of common stock.

Stock options vest based upon the terms within the individual option grants, with an acceleration of the unvested portion of such options upon a change in control event, as defined in the Plan. The options are not transferable except by will or domestic relations order. The option price per share under the Plan cannot be less than the fair market value of the underlying shares on the date of the grant.

In 2012, Ilios granted nonqualified options to purchase 50,000 shares of common stock to a director at $0.50 per share. These options have a vesting schedule of four years and expire in ten years. The total fair value of the options issued in 2012 was $9,750. The weighted-average grant date fair value of stock options granted during 2012 was $0.20.

During the years ended December 31, 2013 and 2012 Ilios recognized stock-based compensation of $(41,311) and $59,361, related to the forfeiture and issuance of stock options and restricted stock, respectively. No tax benefit was recognized related to the stock-based compensation recorded during the year. At December 31, 2013 and 2012 there were 310,000 and 510,000 unvested shares of restricted stock outstanding. At December 31, 2013 and 2012 the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is $9,004

and $67,493, respectively. This amount will be recognized over the weighted average period of 1.59 years.

TECOGEN INC.

Stock option activity relating to Ilios for the year ended December 31, 2013 and 2012 was as follows:

Common Stock Options	Number of Options	Exercise Price Per Share	Weighted Average Exercise Price	Weighted Average Remaining Life	Aggregate Intrinsic Value
Outstanding, December 31, 2011	525,000	$0.10-$0.50	$0.27	8.23 years	$120,000
Granted	50,000	0.50	0.50		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2012	575,000	$0.10-$0.50	$0.29	7.44 years	$120,000
Exercisable, December 31, 2012	—		$—		$—
Vested and expected to vest, December 31, 2012	575,000		$0.29		$120,000
Outstanding, December 31, 2012	575,000	$0.10-$0.50	$0.29	7.44 years	$120,000
Granted	—	—	—		
Exercised	—	—	—		
Canceled and forfeited	—	—	—		
Expired	—	—	—		
Outstanding, December 31, 2013	575,000	$0.10-$0.50	$0.29	6.44 years	$120,000
Exercisable, December 31, 2013	—		$0.50		$—
Vested and expected to vest, December 31, 2013	575,000		$0.29		$120,000

Ilios does not expect any forfeitures and the table above represents all stock options expected to vest. Ilios uses the Black-Scholes option pricing model to determine the fair value of stock options granted. Expected volatility was calculated based on the average volatility of comparable publicly traded companies, the expected life of the options was calculated using the simplified method, and the risk-free interest rate is based on U.S. Treasury zero-coupon issues with a remaining term which approximates the expected life assumed at the date of grant. The Company uses a single weighted-average expected life to value option awards and recognizes compensation on a straight-line basis over the requisite service period for each separately vesting portion of the awards.

For the Ilios awards, the weighted average assumptions used in the Black-Scholes option pricing model for options granted in 2012 are as follows:

	2012
Stock option awards:	
Expected life	6.25 years
Risk-free interest rate	2.03%
Expected volatility	36.1%

TECOGEN INC.

Ilios has granted restricted stock awards to its employees and directors. The awards have only service conditions and carry vesting schedules ranging from 100% 90 days after an IPO up to 100% one year after an IPO.

Restricted stock activity for the Ilios awards, for the years ended December 31, 2013 and 2012 was as follows:

	Number of Restricted Stock	Weighted Average Grant Date Fair Value
Unvested, December 31, 2011	560,000	$0.24
Granted	—	—
Vested	—	—
Forfeited	(50,000)	0.10
Unvested, December 31, 2012	510,000	$0.24
Granted	—	—
Vested	—	—
Forfeited	(200,000)	0.50
Unvested, December 31, 2013	310,000	$0.10

Note 11 – Noncontrolling interests

As of January 1, 2012 Tecogen owned 63.0% of Ilios. During the year ended December 31, 2012 Tecogen purchased 1,000,000 shares of Ilios common stock at $0.50 per share for an aggregate amount of $750,000 which increased Tecogen's ownership interest to 67.4%.

During the year ended December 31, 2012 Ilios sold 1,000,000 shares of common stock to an accredited investor at $0.50 per share for an aggregate amount of $500,000. Also during the year ended December 31, 2012, Tecogen purchased 1,000,000 shares of Ilios common stock at $0.50 per share for an aggregate amount of $500,000. The net result decreased Tecogen’s ownership interest to 65.0%. The table below presents the changes in equity resulting from net loss attributable to Tecogen and transfers to or from noncontrolling interests for the years ended December 31, 2013 and 2012.

Net loss attributable to Tecogen Inc. and
Transfers (to) from the Noncontrolling Interest
Years ended December 31,

	2013	2012
Net loss attributable to Tecogen Inc.	$(3,449,489)	$(1,636,957)
Transfers (to) from the noncontrolling interest		
Decrease in Tecogen's paid-in capital for purchase of 1,000,000 Ilios common shares	—	(174,958)
Increase in Tecogen's paid-in capital upon the sale of 1,000,000 Ilios common shares	—	289,606
Net transfers to noncontrolling interest	—	114,648
Change from net loss attributable to Tecogen Inc. and transfers to noncontrolling interest	$(3,449,489)	$(1,522,309)

Note 12 – Retirement plans

The Company has a defined contribution retirement plan (the “Plan”), which qualifies under Section 401(k) of the Internal Revenue Code (IRC). Under the Plan, employees meeting certain requirements may elect to contribute a percentage of their salary up to the maximum allowed by the IRC. The Company matches a variable amount based on participant contributions up to a maximum of 4.5% of each participant’s salary. The Company contributed approximately $125,680 and $116,850 to the Plan for the years ended December 31, 2013 and 2012.

TECOGEN INC.

Note 13 – Related party transactions

The Company has five affiliated companies, namely American DG Energy, EuroSite Power, GlenRose Instruments Inc., or GlenRose Instruments, Pharos LLC, or Pharos, and Levitronix Technologies LLC, or Levitronix. These companies are affiliates because several of the major stockholders of those companies, have a significant ownership position in the Company. American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix do not own any shares of the Company, and the Company does not own any shares of American DG Energy, EuroSite Power, GlenRose Instruments, Pharos or Levitronix. The business of GlenRose Instruments, Pharos and Levitronix is not related to the business of the Company.

American DG Energy, EuroSite Power, GlenRose Instruments, Pharos and Levitronix are affiliated companies by virtue of common ownership. The common stockholders include:

- John N. Hatsopoulos, the Company’s Chief Executive Officer who is also: (a) the Chief Executive Officer and a director of American DG Energy and holds 10.7% of American DG Energy’s common stock; (b) the Chairman of EuroSite Power; (c) a director of Ilios and holds 7.2% of EuroSite Power’s common stock; and (d) the Chairman of GlenRose Instruments and holds 15.7% of GlenRose Instruments’ common stock.

- Dr. George N. Hatsopoulos, who is John N. Hatsopoulos’ brother, and is also: (a) a director of American DG Energy and holds 13.6% of American DG Energy’s common stock; (b) an investor in Ilios and holds 3.1% of Ilios' common stock; (c) an investor of GlenRose Instruments and holds 15.7% of GlenRose Instruments' common stock; (d) an investor of Pharos and may be deemed to hold 24.4% of Pharos' common stock; and (e) an investor of Levitronix and may be deemed to hold 21.4% of Levitronix’s common stock.

Additionally, the following related persons had or may have a direct or indirect material interest in our transactions with our affiliated companies:

- Barry J. Sanders, who is: (a) the President and Chief Operating Officer of American DG Energy, (b) the Chief Executive Officer and a director of EuroSite Power and (c) the Chairman of Ilios.

- Anthony S. Loumidis, the Company’s former Vice President and Treasurer who is: (a) the former Chief Financial Officer Secretary and Treasurer of American DG Energy, (b) the former Chief Financial Officer Secretary and Treasurer of EuroSite Power, (c) the former Chief Financial Officer Secretary and Treasurer of GlenRose Instruments and (d) the former Treasurer of Ilios.

American DG Energy has sales representation rights to the Company’s products and services in New England. Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2013 and 2012 amounted to $758,930 and $3,795,666, respectively.

On October 20, 2009, American DG Energy, in the ordinary course of its business, signed a Sales Representative Agreement with Ilios to promote, sell and service the Ilios high-efficiency heating products, such as the high efficiency water heater, in the marketing territory of the New England States, including Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and Maine. The marketing territory also includes all of the nations in the European Union. The initial term of this Agreement is for five years, after which it may be renewed for successive one-year terms upon mutual written agreement.

On September 24, 2001, the Company entered into subscription agreements with investors for the sale of convertible debentures. The primary investors were George N. Hatsopoulos, who subscribed for $200,000 of the debentures, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos’ adult children, who subscribed for a

total amount of $100,000 of the debentures. The debentures accrue interest at a rate of 6% per annum and are due on September 24, 2007. The debentures are convertible, at the option of George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, into shares of Common Stock at a conversion price of $1.20 per share.

On September 24, 2007, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children agreed to extend the debenture term to September 24, 2011. On May 11, 2009, George N. Hatsopoulos converted a portion of the principal in the amount of $109,033 of the debentures and accrued interest in the amount of $90,967 into 400,000 shares of Common Stock in the Company's newly formed subsidiary, Ilios, at $2.00 per share. Also, on May 11, 2009, John N. Hatsopoulos converted principal amount of $427,432 in demand notes payable and accrued interest in the amount of $72,567 into 1,000,000 shares of Ilios Common Stock at $2.00 per share. The difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness was recorded as additional paid-in capital.

TECOGEN INC.

On September 30, 2009, Joseph J. Ritchie elected to convert $30,000 of the outstanding principal amount of the debenture, plus accrued interest of $14,433, into 37,028 shares of Common Stock at a conversion price of $1.20 per share. On September 24, 2011, George N. Hatsopoulos, and the John N. Hatsopoulos 1989 Family Trust for the benefit of Mr. Hatsopoulos' adult children, agreed to extend their term to September 24, 2013 and requested that accrued interest in the amount of $72,959 be converted into the Company's Common Stock at $2.00 per share (which was the average price of the Company's stock from September 24, 2001 to September 24, 2011).

On September 30, 2012, the debentures, including accrued interest, were converted into 170,480 shares of Common Stock held in the JNH 1989 Family Trust for the benefit of Nia Marie Hatsopoulos and 170,480 shares of Common Stock held in the JNH 1989 Family Trust for the benefit of Alexander J. Hatsopoulos for whom Mr. and Mrs. Paris Nicolaidis are the trustees. Mr. John N. Hatsopoulos disclaims beneficial ownership of the shares held by this trust.

On October 18, 2013, the remaining holder of the debentures, George N. Hatsopoulos, converted the principal balance of $90,967 into 75,806 shares of the Company's common stock at a conversion price of $1.20 per share. In addition, Mr. Hatsopoulos requested that the accrued interest earned in 2012 in the amount of $6,913 be converted into 2,161 shares of the Company's common stock at a conversion price of $3.20 per share and that the accrued interest earned on or after January 1, 2013 in the amount of $4,367 be converted into 970 shares of the Company's common stock at a conversion price of $4.50 per share.

On September 10, 2008 the Company entered into a demand note agreement with John N. Hatsopoulos, in the principal amount of $250,000 at an annual interest rate of 5%. On September 7, 2011 the Company entered in to an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $750,000 at an annual interest rate of 6%. On November 30, 2012 the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $300,000 at an annual interest rate of 6%. Unpaid principal and interest on the demand notes are due upon demand. On October 3, 2013 the Company entered into an additional demand note agreement with John N. Hatsopoulos, in the principal amount of $450,000 at an annual interest rate of 6%. On January 6, 2014, the Company repaid the then outstanding principal balance of 1,750,000 together with accrued interest of $175,311.

On March 25, 2013, the Company entered into a Revolving Line of Credit Agreement, or the Credit Agreement, with John N. Hatsopoulos, our Chief Executive Officer. Under the terms of the Credit Agreement, as amended on August 13, 2013, Mr. Hatsopoulos has agreed to lend the Company up to an aggregate of $1,500,000 from time to time, at the written request of the Company. Any amounts borrowed by the Company pursuant to the Credit Agreement will bear interest at the Bank Prime Rate as quoted from time to time in the Wall Street Journal plus 1.5% per year. Repayment of the principal amount borrowed pursuant to the Credit Agreement will be due on March 1, 2014. In addition, the company may prepay accrued interest, provided that prepayment may not be made prior to January 1, 2014.The Credit Agreement terminates on March 1, 2014. As of December 31, 2013 the Company has borrowed $1,200,000 pursuant to the Credit Agreement. On January 6, 2014, the Company repaid the then outstanding principal balance of $1,200,000 together with accrued interest of $25,347.

On December 23, 2013, the company entered into a Senior Convertible Promissory Note (the "Note") with Michaelson Capital Special Finance Fund LP, ("Michaelson"), for the principal amount of $3,000,000 with interest at 4% per annum for a term of three years. The Note is a senior unsecured obligation which pays interest only on a monthly basis in arrears at a rate of 4% per annum, unless earlier converted in accordance with the terms of the agreement prior to such date. The principal amount, if not converted, is due on the third anniversary of the Note, December 31, 2016.The Note is senior in right of payment to any unsecured indebtedness that is expressly subordinated in right of payment to the Note. The Note is convertible into shares of the Company's common stock at 185.19 shares of our common stock per $1,000 principal amount of Note (equivalent to a conversion price of $5.40

per share). Debt issuance costs of $140,433 are being amortized to expense over the term of the Note using the effective interest method. At December 31, 2013, there were 555,556 shares of common stock issuable upon conversion of the Company’s outstanding convertible debentures.

In addition, on December 23, 2013, Michaelson participated in our private placement, investing $2,000,000 to purchase 444,445 shares of common stock at $4.50 per share. As of the purchase date and December 31, 2010, Michaelson, on a fully diluted basis, owns 6.4% of the Company. As Michaelson's beneficial ownership is 6.4% after this transaction, it is now considered a related party.

TECOGEN INC.

For additional disclosure on the Company's debt see Note 7 – Demand notes payable, convertible debentures and line of credit – related party.

John N. Hatsopoulos' salary is $1.00 per year. On average, Mr. Hatsopoulos spends approximately 50% of his business time on the affairs of the Company; however such amount varies widely depending on the needs of the business and is expected to increase as the business of the Company develops.

On January 1, 2006 the Company signed a Facilities and Support Services Agreement with American DG Energy for a period of one year, renewable annually, on January 1st, by mutual agreement. That agreement was amended July 1, 2012. Under this agreement, the Company provides American DG Energy with certain office and business support services and also provides pricing based on a volume discount depending on the level of American DG Energy purchases of cogeneration and chiller products. For certain sites, American DG Energy hires the Company to service its chiller and cogeneration products. The Company also provides office space and certain utilities to American DG Energy based on a monthly rate set at the beginning of each year. Also, under this agreement, American DG Energy has sales representation rights to the Company's products and services in New England.

The Company subleases portions of its corporate offices and manufacturing facility to sub-tenants under annual sublease agreements. For the years ended December 31, 2013 and 2012, the Company received $113,784 and $158,898, respectively, from American DG Energy, Levitronix LLC and Alexandros Partners LLC. In addition, for the years ended December 31, 2013 and 2012 the Company received from the same companies, $90,348 and $101,218, respectively, to offset common operating expenses incurred in the administration and maintenance of its corporate office and warehouse facility.

The Company's headquarters are located in Waltham, Massachusetts and consist of 27,000 square feet of office and storage space that are shared with American DG Energy and other tenants. The lease expires on March 31, 2024. We believe that our facilities are appropriate and adequate for our current needs.

Revenue from sales of cogeneration and chiller systems, parts and service to American DG Energy during the years ended December 31, 2013 and 2012 amounted to $758,930 and $3,795,666, respectively. In addition, Tecogen pays certain operating expenses, including benefits and insurance, on behalf of American DG Energy. Tecogen was reimbursed for these costs. As of December 31, 2013 and 2012, the total amount due (to) or from American DG Energy was $(119,667) and $70,811, respectively.

Note 14 – Fair value measurements

The Company has categorized its financial assets and liabilities, based on the priority of the inputs to the valuation technique, into a three-level fair value hierarchy as set forth below. If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement the instrument. The three levels of the hierarchy are defined as follows:

Level 1 - Unadjusted quoted prices in active markets for identical assets or liabilities. We currently do not have any Level 1 financial assets or liabilities.

Level 2 - Observable inputs other than quoted prices included in Level 1. Level 2 inputs include quoted prices for identical assets or liabilities in non-active markets, quoted prices for similar assets or liabilities in active markets and inputs other than quoted prices that are observable for substantially the full-term of the asset or liability.

Level 3 - Unobservable inputs reflecting management's own assumptions about the input used in pricing the asset or liability. We currently do not have any Level 3 financial assets or liabilities.

TECOGEN INC.

There were no financial instruments measured at fair value on a recurring basis as of December 31, 2013. The following table presents the input level used to determine the fair values of the Company’s financial instruments measured at fair value on a recurring basis for the year ended December 31, 2012:

	December 31, 2012	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Certificates of deposit	181,859	—	181,859	—
Total Assets	$181,859	$—	$181,859	$—

Certificates of deposits approximate fair value, based on estimates using current market rates offered for deposits with similar remaining maturities. The Company has no assets or liabilities that are measured at fair value on a non-recurring basis.

Note 15 - Asset acquisition

On January 9, 2013 the Company purchased certain assets, both tangible and intangible, required to manufacture the generator used in its InVerde product from Danotek Motion Technologies. The aggregate consideration paid in cash by the Company was $497,800, of which $17,400 represents the fair value of inventory and $199,530 represents the estimated fair value of property, plant and equipment consisting of machinery and equipment, computer equipment, and tooling, which is depreciated over useful lives ranging from 5 to 8.5 years. The fair value of the property, plant and equipment was estimated utilizing a replacement cost method. In addition, $240,000 of the purchase consideration represents the fair value of identified intangible assets using a relief from royalty method with a useful life of fifteen years. The balance of $40,870 is included in goodwill in the accompanying condensed consolidated balance sheet, which consists largely of economies of scale expected from combining the manufacturing of the generator into Tecogen's operations. Acquisition related costs were not material to the financial statements and were expensed as incurred to general and administrative expenses.

This transaction was accounted for under the purchase method of accounting in accordance with FASB ASC Topic 805, Business Combinations. Under the purchase method of accounting, the total purchase price has been allocated to the net tangible and intangible assets acquired based on estimates of their fair values by the Company's management. There is one reporting unit within the Company.

Under the purchase method of accounting, an acquisition is recorded as of the closing date, reflecting the purchased assets, at their acquisition date fair values. Intangible assets that are identifiable are recognized separately from goodwill which is measured and recognized as the excess of the fair value, as a whole, over the net amount of the recognized identifiable assets acquired.

The purchase price has been allocated as follows:

Inventory	$17,400
Machinery and equipment	171,910
Computer equipment	22,070
Tooling	5,550
Developed technology	240,000
Goodwill	40,870

$497,800

TECOGEN INC.

Note 16 – Income taxes

A reconciliation of the federal statutory income tax provision to the Company's actual provision for the years ended December 31, 2013 and 2012 is as follows:

	2013	2012
Benefit at federal statutory tax rate	$1,280,000	$680,000
Unbenefited operating losses	(1,280,000)	(680,000)
Income tax provision	$—	$—

The components of net deferred tax assets recognized in the accompanying consolidated balance sheets at December 31, 2013 and 2012 are as follows:

	2013	2012
Net operating loss carryforwards	$4,850,000	$3,380,000
Accrued expenses and other	598,000	676,000
Accounts receivable	40,000	60,000
Inventory	117,000	130,000
Property, plant and equipment	155,000	94,000
	5,760,000	4,340,000
Valuation allowance	(5,760,000)	(4,340,000)
Net deferred tax asset	$—	$—

As of December 31, 2013, the company has federal loss carryforwards of approximately $12,300,000, which expire beginning in 2021 through 2033. In addition, the Company has varying amounts of state net operating losses, expiring at various dates starting in 2012 through 2033. The federal net operating losses include approximately $2,800,000 attributable to the Company’s majority owned subsidiary, which can only be used against income of that entity.

Management has determined that it is more likely than not that the company will not recognize the benefits of the federal and state deferred tax assets and as a result has recorded a valuation allowance against the entire net deferred tax asset. The valuation allowance has increased by $1,420,000 during the year ended December 31, 2013. If the company should generate sustained future taxable income, against which these tax attributes may be recognized, some portion or all of the valuation allowance would be reversed.

The Company did not record a benefit for income taxes related to its operating losses for the years ended December 31, 2013 and 2012.

The Company has analyzed its current tax return compliance positions and has determined that no uncertain tax positions have been taken that would require recognition.

Note 17 – Subsequent events

On January 2, 2014, the Company opened a Certificate of Deposit in the amount of $583,073 to collateralize a letter of credit, at the request of Michaelson. This Certificate of Deposit allowed the bank to remove their UCC filing on the Company. These funds will remain restricted until the letter of credit is released. See Note 8 for further discussion.

On January 6, 2014, the Company repaid all debt owed to its Chief Executive Officer including demand notes with a principal balance $1,750,000 and accrued interest of $175,311 and the line of credit with an outstanding principal balance of $1,200,000 and accrued interest of $25,347.

The Company continued its private placement through January 17, 2014. During 2014 the Company sold an additional 1,400 shares of common stock at $4.50 per share for a total of $6,300 of additional funds raised after year end 2013.

On February 25, 2014, the Company executed a Collective Bargaining Agreement with International Union of Operating Engineers, Local 68 covering 3 of its service employees in New Jersey.

On March 26, 2014, the Company secured a working capital line of credit with John Hatsopoulos, the Company's Chief Executive Officer, in the amount of $3,500,000 which may be used in the occurrence of certain events.

The Company has evaluated subsequent events through the date of this report and determined that no additional subsequent events occurred that would require recognition in the consolidated financial statements or disclosure in the notes thereto.