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# AMERICAN DG ENERGY INC.

## ANNUAL REPORT 2008

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Washington, DC 20549



Dear Shareholders,

We are pleased to report that American DG Energy Inc. continued its significant growth in 2008 due to the increased desire for energy efficiency, green sustainability and reliable savings. Fluctuating energy prices, the search for real environmental solutions and a challenging economy have made our On-Site Utility energy program more valuable to our customer base. Our efforts to satisfy customers' energy, environmental and economic needs into a single, simple offering have made us a leading company in the alternative energy marketplace.

American DG Energy markets an "On-Site Utility" offering clean electricity, heat, hot water and cooling to commercial, institutional and light industrial customers. Through long-term agreements, we sell the energy produced on-site as an alternative to the outright sale of energy equipment. Our services are most desirable wherever electric rates are high. We design, install, own, operate and maintain complete combined heat and power ("CHP") systems and cooling systems tailored to a customer's specific site requirements. We uniquely combine energy savings that improve the environment with exceptional economics. By outsourcing the ownership, management and financing of the CHP systems to us, our customers enjoy significant economic benefits without the requirement of capital investment, specialized in-house technical skills, manpower, operational responsibility or ownership.

With our "On-Site Utility" business model we relocate the production of electricity from a large, distant power plant to an appropriately-sized, on site CHP system. Since our energy systems have greater efficiency and can operate 24 hours per day, the potential carbon reduction is greater than most other energy technologies. A standard utility power plant, for example, is often only 33% efficient while our standard CHP system approaches 90% efficiency. Over the term of an agreement, our typical CHP system running at 100% capacity can offset up to 6,480 tons of carbon dioxide (CO<sub>2</sub>) gas, which is the equivalent of planting 1,770 acres of forest land or eliminating the emissions of 1,110 cars. In recognition of our emissions reductions, we received an award from the U.S. Environmental Protection Agency stating that through 2008 our CHP systems produced an estimated 9,000 metric tons of carbon equivalents less than a typical separate heat and power system, resulting in reduced emissions equivalent to planting 2,311 acres of forest or removing the emissions of 1,861 cars.

In 2008 our overall revenues increased by 13% to \$6.6 million as compared to revenues of \$5.8 million in 2007. During the year we offered our customers both our popular On-Site Utility energy solution and a turnkey solution (often with a long-term operation responsibility with fees). In 2008, our core On-Site Utility energy revenues increased by 57% to \$5.1 million as compared to revenues of \$3.2 million in 2007. Our gross margins in 2008 were 13% as compared with 22% over the same period in 2007. Also, in 2008 the fixed-assets related to our owned energy systems were \$8.4 million and our cash balance was \$2.4 million.

During the year we continued to focus our sales and operations on properties for the healthcare, multi-tenant residential, hospitality, fitness, and education industries. We have signed agreements in Connecticut, Massachusetts, New Jersey and New York. At the end of 2008, our installed base consisted of 56 energy systems at 30 locations in the Northeast representing 4,240 kW of installed electricity capacity plus thermal energy. Our backlog was 24 additional energy systems at 12 locations representing an additional 1,480 kW of installed electricity capacity plus thermal energy.

While last year proved to be very challenging for many companies here and abroad, we believe that we are well positioned to support future growth. It is our commitment to our customers, shareholders and employees to create and deliver effective solutions. With the marketplace and our government supporting energy efficiency, affordable green solutions and the need for economic savings, our prospects for 2009 and beyond remain strong.

Thank you for your continued support.

Sincerely,

A handwritten signature in black ink, appearing to read "John N. Hatsopoulos". The signature is fluid and cursive, with a long horizontal stroke at the end.

John N. Hatsopoulos  
Chief Executive Officer

A handwritten signature in black ink, appearing to read "Barry J. Sanders". The signature is cursive and clearly legible.

Barry J. Sanders  
President and Chief Operating Officer

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 10-K**

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

For the fiscal year ended December 31, 2008  
or

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

Commission file number 0-52294

**AMERICAN DG ENERGY INC.**

(Exact name of Registrant as specified in its charter)

Delaware  
(State of incorporation or organization)

~~SEC~~  
**Mail Processing  
Section**

04-3569304  
(IRS Employer Identification No.)

45 First Avenue  
Waltham, Massachusetts  
(Address of Principal Executive Offices)

APR 3 02009

**Washington, DC  
101**

02451  
(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  
Common Stock, \$0.001 par value

Name of each exchange on which registered  
OTC Bulletin Board

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

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

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 [X] 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. [X]

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 [ ]

Accelerated filer [ ]

Non-accelerated filer [ ]

Smaller reporting company [X]

(Do not check if a smaller reporting company)

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

As of June 30, 2008, the aggregate market value of the voting shares of the registrant held by non-affiliates on the OTC Bulletin Board was approximately \$19,733,695 based on a closing price per share of \$1.43. For purposes of this calculation, an aggregate of 20,119,709 shares of common stock held directly or by affiliates of the directors and officers of the registrant have been included in the number of shares held by affiliates.

As of March 20, 2009 the registrant's shares of common stock outstanding were: 34,034,496.

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

Certain information required by in Items 10, 11, 12, 13 and 14 of Part III of this Annual Report on Form 10-K is incorporated by reference from our definitive Proxy Statement for our 2009 Annual Meeting of Shareholders scheduled to be held on May 29, 2009.

#### **WARNING 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 NEGATIVE 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.

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**AMERICAN DG ENERGY INC.**  
**ANNUAL REPORT ON FORM 10-K**  
**FOR THE FISCAL YEAR ENDED DECEMBER 31, 2008**

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**Item 1. Business.**

**General**

American DG Energy Inc. (“American DG Energy”, the “company”, “we”, “our” or “us”) distributes, owns and operates clean, on-site energy systems that produce electricity, hot water, heat and cooling. Our business model is to own the equipment that we install at customers’ facilities and to sell the energy produced by these systems to the customers on a long-term contractual basis. We call this business the American DG Energy “On-Site Utility”.

We offer natural gas powered cogeneration systems that are highly reliable and energy efficient. Our cogeneration systems produce electricity from an internal combustion engine driving a generator, while the heat from the engine and exhaust is recovered and typically used to produce heat and hot water for use at the site. We also distribute and operate water chiller systems for building cooling applications that operate in a similar manner, except that the engine’s power drives a large air-conditioning compressor while recovering heat for hot water. Cogeneration systems reduce the amount of electricity that the customer must purchase from the local utility and produce valuable heat and hot water for the site to use as required. By simultaneously providing electricity, hot water and heat, cogeneration systems also have a significant, positive impact on the environment by reducing the carbon or CO<sub>2</sub> produced by offsetting the traditional energy supplied by the electric grid and conventional hot water boilers.

Distributed Generation of electricity or DG, or often referred to as cogeneration systems, or combined heat and power systems, or CHP, is an attractive option for reducing energy costs and increasing the reliability of available energy. DG has been successfully implemented by others in large industrial installations over 10 Megawatts, or MW, where the market has been growing for several years, and is increasingly being accepted in smaller size units because of technology improvements, increased energy costs and better DG economics. We believe that our target market (users of up to 1 MW) has been barely penetrated and that the reduced reliability of the utility grid, increasing cost pressures experienced by energy users, advances in new, low cost technologies and DG-favorable legislation and regulation at the state and federal level will drive our near-term growth and penetration into our target market. The company maintains a website at [www.americandg.com](http://www.americandg.com), but our website address included in this Annual Report on Form 10-K is a textual reference only and the information in the website is not incorporated by reference into this Annual Report on Form 10-K.

The company was incorporated as a Delaware corporation on July 24, 2001 to install, own, operate and maintain complete DG systems and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2008, we had installed energy systems, representing approximately 4,240 kilowatts, or kW, 32.4 million British thermal units, or MMBtu’s, of heat and hot water and 600 tons of cooling. kW is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated. Due to the high efficiency CHP systems, the Environmental Protection Agency, or EPA, has recognized them as a means to improve the environment. We have estimated that our currently installed energy systems running at 100% capacity have the potential to produce approximately 24,200 metric tons of carbon equivalents, less than typical separate heat and power systems, resulting in emissions reductions equivalent to planting 6,600 acres of forest or removing the emissions of 4,100 automobiles.

We believe that our primary near-term opportunity for DG energy and equipment sales is where commercial electricity rates exceed \$0.12 per kW hour, or kWh, which is predominantly in the Northeast and California. These areas represent approximately 15% of the U.S. commercial power market, with electricity revenues in excess of \$20.0 billion per year (see Figure 1 on page 6). Attractive DG economics are currently attainable in applications that include hospitals, nursing homes, multi-tenant residential housing, hotels, schools and colleges, recreational facilities, food processing plants, dairies and other light industrial facilities. Two CHP market analysis reports sponsored by the Energy Information Administration, or EIA, in 2000 detailed the prospective CHP market in the commercial and institutional sectors<sup>1</sup> and in the industrial sectors<sup>2</sup>. These data sets were used to estimate the CHP market potential in the 100 kW to 1 MW size range. These target market segments comprise over 163,000 sites totaling 12.2 million kW of prospective DG capacity. This is the equivalent of an \$11.7 billion annual electricity market plus a \$7.3 billion heat and hot water energy market, for a combined market potential of \$19.0 billion.

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<sup>1</sup> *The Market and Technical Potential for Combined Heat and Power in the Commercial/Institutional Sector*; Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000

<sup>2</sup> *The Market and Technical Potential for Combined Heat and Power in the Industrial Sector*; Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000

We believe that the largest number of potential DG users in the U.S. require less than 1 MW of electric power and less than 1,200 tons of cooling capacity. We are able to design our systems to suit a particular customer's needs because of our ability to place multiple units at a site. This approach is part of what allows our products and services to meet changing power and cooling demands throughout the day (also from season-to-season) and greatly improves efficiency through a customer's varying high and low power requirements.

American DG Energy purchases energy equipment from various suppliers. The primary type of equipment used is a natural gas-powered, reciprocating engine provided by Tecogen Inc., or Tecogen. Tecogen is a leading manufacturer of natural gas, engine-driven commercial and industrial cooling and cogeneration systems suitable for a variety of applications, including hospitals, nursing homes and schools.

As power sources that use alternative energy technologies mature to the point that they are both reliable and economical, we will consider employing them to supply energy for our customers. We regularly assess the technical, economic, and reliability issues associated with systems that use solar, micro-turbine or fuel cell technologies to generate power.

## **Background and Market**

The delivery of energy services to commercial and residential customers in the U.S. has evolved over many decades into an inefficient and increasingly unreliable structure. Power for lighting, air conditioning, refrigeration, communications and computing demands comes almost exclusively from centralized power plants serving users through a complex grid of transmission and distribution lines and substations. Even with continuous improvements in central station generation and transmission technologies, today's power industry is only about 33% efficient<sup>3</sup> meaning that it discharges to the environment roughly twice as much heat as the amount of electrical energy delivered to end-users. Since coal accounts for more than half of all electric power generation, these inefficiencies are a major contributor to rising atmospheric CO<sub>2</sub> emissions. As countermeasures are sought to limit global warming, pressures against coal will favor the deployment of alternative energy technologies.

On-site boilers and furnaces burning either natural gas or petroleum distillate fuels produce most thermal energy for space heating and hot water services. This separation of thermal and electrical energy supply services has persisted despite a general recognition that CHP can be significantly more energy efficient than central generation of electricity by itself. Except in large-scale industrial applications (e.g., paper and chemical manufacturing), cogeneration has not attained general acceptance. This was due, in part, to the long-established monopoly-like structure of the regulated utility industry. Also, the technologies previously available for small on-site cogeneration systems were incapable of delivering the reliability, cost and environmental performance necessary to displace or even substantially modify the established power industry structure.

The competitive balance began to change with the passage of the Public Utility Regulatory Policy Act of 1978, a federal statute that has opened the door to gradual deregulation of the energy market by the individual states. In 1979, the accident at Three Mile Island effectively halted the massive program of nuclear power plant construction that had been a centerpiece of the electric generating strategy among U.S. utilities for two decades. Several factors caused utilities' capital spending to fall drastically, including well publicized cost overruns at nuclear plants, an end to guaranteed financial returns on costly new facilities, and growing uncertainty over which power plant technologies to pursue. Recently, investors have become increasingly reluctant to support the risks of the long-term construction projects required for new conventional generating and distribution facilities.

Because of these factors, electricity reserve margins have declined, and the reliability of service has begun to deteriorate, particularly in regions of high economic growth. Widespread acceptance of computing and communications technologies by consumers and commercial users has further increased the demand for electricity, while also creating new requirements for very high power quality and reliability. At the same time, technological advances in emission control, microprocessors and internet technologies have sharply altered the competitive balance between centralized and DG. These fundamental shifts in economics and requirements are key to the emerging opportunity for DG equipment and services.

## **The Role of DG**

DG, or cogeneration, is the production of two sources or two types of energy (electricity or cooling and heat) from a single energy source (natural gas). We use technology that utilizes a low-cost, mass-produced, internal combustion engine

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<sup>3</sup> *Energy Information Administration, Voluntary Reporting of Greenhouse Gases, 2004, Section 2, Reducing Emissions from Electric Power, Efficiency Projects: Definitions and Terminology, page 20*



from General Motors, used primarily in light trucks and sport utility vehicles, that is modified to run on natural gas. The engine spins either a standard generator to produce electricity, or a conventional compressor to produce cooling. For heating, since the working engine generates heat, we capture the byproduct heat with a heat exchanger and utilize the heat for facility applications in the form of space heating and hot water for buildings or industrial facilities. This process is very similar to an automobile, where the engine provides the motion to the automobile and the byproduct heat is used to keep the passengers warm during the winter months. For refrigeration or cooling, standard available equipment uses an electric motor to spin a conventional compressor to make cooling. We replace the electric motor with the same modified engine that runs on natural gas to spin the compressor to run a refrigeration cycle and produce cooling.

DG refers to the application of small-scale energy production systems, including electricity generators, at locations in close proximity to the end-use loads that they serve. Integrated energy systems, operating at user sites but interconnected to existing electric distribution networks, can reduce demand on the nation's utility grid, increase energy efficiency, avoid the waste inherent in long distance wire and cable transmission of electricity, reduce air pollution and greenhouse gas emissions, and protect against power outages, while, in most cases, significantly lowering utility costs for power users and building operators.

The growing importance of DG as a key component of our future energy supply is underscored by the establishment of a Distributed Energy Program within the U.S. Department of Energy, or the DOE. The DOE has stated its position on this issue as follows:

*"...there are two problems at the root of the current power crunch. There is not always enough power generation available to meet peak demand, and existing transmission lines cannot carry all of the electricity needed by consumers.... Distributed Energy resources are the power of choice for providing customers with reliable energy supplies.... These Distributed Energy products and services use natural gas and renewable energy and will be easily interconnected into the nation's infrastructure for the generation of electricity. Furthermore, our Program works to encourage the expanded use of Distributed Energy technologies in applications with the right combination and occurrence of electrical and thermal demand..."*

Until recently, many DG technologies have not been a feasible alternative to traditional energy sources because of economic, technological and regulatory considerations. Even now, many "alternative energy" technologies (such as solar, wind, fuel cells and micro-turbines) have not been sufficiently developed and proven to economically meet the demands of commercial users or the ability to be connected to the existing utility grid.

We supply cogeneration systems that are capable of meeting the demands of commercial users and that can be connected to the existing utility grid. Specific advantages of the company's on-site DG of multiple energy services, compared with traditional centralized generation and distribution of electricity alone, include the following:

- Greatly increased overall energy efficiency (typically over 80% versus less than 33% for the existing power grid).
- Rapid adaptation to changing demand requirements (e.g., weeks, not years to add new generating capacity where and when it is needed).
- Ability to by-pass transmission line and substation bottlenecks in congested service areas.
- Avoidance of site and right-of-way issues affecting large-scale power generation and distribution projects.
- Clean operation, in the case of natural gas fired reciprocating engines using microprocessor combustion controls and low-cost exhaust catalyst technology developed for automobiles, producing exhaust emissions well below the world's strictest regional environmental standards (e.g., southern California).
- Rapid economic paybacks for equipment investments, often three to five years when compared to existing utility costs and technologies.
- Relative insensitivity to fuel prices due to high overall efficiencies achieved with cogeneration of electricity and thermal energy services, including the use of waste heat to operate absorption type air conditioning systems (displacing electric-powered cooling capacity at times of peak summer demand).

- Reduced vulnerability of multiple de-centralized small-scale generating units compared to the risk of major outages from natural disasters or terrorist attacks against large central-station power plants and long distance transmission lines.
- Ability to remotely monitor, control and dispatch energy services on a real-time basis using advanced switchgear, software, microprocessor and internet modalities. Through our on-site energy products and services, energy users are able to optimize, in real time, the mix of centralized and distributed electricity-generating resources.

The disadvantages of the company's on-site DG are:

- Cogeneration is a mechanical process and our equipment is susceptible to downtime or failure.
- The base-rate of an electric utility is determined by a certain number of subscribers. DG at a significant scale will reduce the number of subscribers and therefore it may increase the base-rate for the electric utility for its customer base.
- By committing to our long-term agreements, a customer may be forfeiting the opportunity to use more efficient technology that may become available in the future.

Also, DG systems possess significant positive environmental impact. The EPA has created a Combined Heat and Power Partnership to promote the benefits of DG systems. The company is a member of this Partnership. The following statement is found on the EPA web site.

*"Combined heat and power systems offer considerable environmental benefits when compared with purchased electricity and onsite-generated heat. By capturing and utilizing heat that would otherwise be wasted from the production of electricity, CHP systems require less fuel than equivalent separate heat and power systems to produce the same amount of energy. Because less fuel is combusted, greenhouse gas emissions, such as carbon dioxide (CO<sub>2</sub>), as well as criteria air pollutants like nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>), are reduced."*

### **The DG Market Opportunity**

We believe that our primary near-term opportunity for DG energy and equipment sales is where commercial electricity rates exceed \$0.12 per kWh, which is predominantly in the Northeast and California. These areas represent approximately 15% of the U.S. commercial power market, with electricity revenues in excess of \$20 billion per year (see Figure 1. on page 6). Attractive DG economics are currently attainable in applications that include hospitals, nursing homes, multi-tenant residential housing, hotels, schools and colleges, recreational facilities, food processing plants, dairies and other light industrial facilities. Two CHP market analysis reports sponsored by the EIA in 2000 detailed the prospective CHP market in the commercial and institutional sectors<sup>4</sup> and in the industrial sectors<sup>5</sup>. These data sets were used to estimate the CHP market potential in the 100 kW to 1 MW size range. These target market segments comprise over 163,000 sites totaling 12.2 million kW of prospective DG capacity. This is the equivalent of an \$11.7 billion annual electricity market plus a \$7.3 billion heat and hot water energy market, for a combined market potential of \$19 billion.

As shown in Figure 1 on page 6, there are substantial variations in the electric rates paid by commercial and institutional customers throughout the U.S. In high-cost regions, monthly payments for energy services supplied by on-site DG projects yield rapid paybacks (e.g., often 3-5 years) on an investment in our systems. An additional 15% of commercial sector electricity, representing annual revenues of \$14 billion, is sold at rates between \$0.085 and \$0.12 per kWh as shown in Figure 1 on page 6. Although paybacks on DG projects would be less rapid in such regions, future rate increases are expected to improve DG economics.

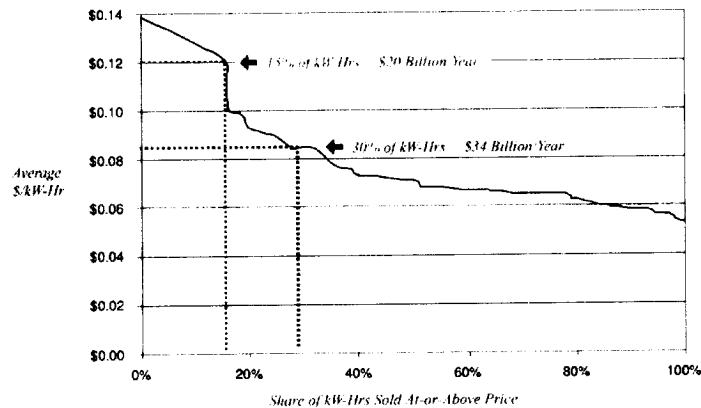
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<sup>4</sup> *The Market and Technical Potential for Combined Heat and Power in the Commercial/Institutional Sector*; Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000

<sup>5</sup> *The Market and Technical Potential for Combined Heat and Power in the Industrial Sector*; Prepared for the Energy Information Administration; Prepared by ONSITE SYCOM Energy Corporation; January 2000

Figure 1

**The DG Market Opportunity**  
*U.S. Commercial/Institutional Electric Rate Profile*



Source: U.S. Energy Information Administration Data [2002]

**Business Model**

We are a DG onsite energy company that sells energy in the form of electricity, heat, hot water and air conditioning under long-term contracts with commercial, institutional and light industrial customers. We install our systems at no cost to our customers and retain ownership of the system. Because our systems operate at over 80% efficiency (versus less than 33% for the existing power grid), we are able to sell the energy produced by these systems to our customers at prices below their existing cost of electricity (or air conditioning), heat and hot water. Our cogeneration systems consist of natural gas-powered internal combustion engines that drive an electrical generator to produce electricity and that capture the engine heat to produce space heating and hot water. Our energy systems also can be configured to drive a compressor that produces air conditioning and that also captures the engine heat. As of December 31, 2008, we had 56 energy systems operational.

To date, each of our installations runs in conjunction with the electric utility grid and requires standard interconnection approval from the local utility. Our customers use both our energy system and the electric utility grid for their electricity requirements. We typically supply the first 20% to 60% of the building's electricity requirements while the remaining electricity is supplied by the electric utility grid. Our customers are contractually bound to use the energy we supply.

To date, the price that we have charged our customers is set in our customer contracts at a discount to the price of the building's local electric utility. For the 20% to 60% portion of the customer's electricity that we supply, the customer realizes immediate savings on its electric bill. In addition to electricity, we sell our customers the heat and hot water at the same price they were previously paying or at a discount equivalent to their discount from us on electricity. Our air conditioning systems are also priced at a discount so that the customer realizes overall cost savings from the installation.

Since we own and operate the energy systems and since our customers have no investment in the units, our customers benefit from no capital requirements and no operating responsibilities. We operate the energy systems so our customers require no staff and have no energy system responsibilities; they are bound, however, to pay for the energy supplied by the energy systems over the term of the agreement.

**Energy and Products Portfolio**

We provide a full range of CHP product and energy options. Our primary energy and products are listed below:

- Energy Sales
  - Electricity
  - Thermal (Hot Water, Heat and Cooling)
- Energy Producing Products
  - Cogeneration Packages
  - Chillers

- Complementary Energy Equipment (e.g., boilers, etc.)
- Alternative Energy Equipment (e.g., solar, fuel cells, etc.)
- Turnkey Installation Energy Producing Products with Incentives
- Other Revenue Opportunities

***Energy Sales***

For customers seeking an alternative to the outright purchase of CHP equipment, we will install, maintain, finance, own and operate complete on-site CHP systems that supply, on a long-term, contractual basis, electricity and other energy services. We sell the energy to customers at a guaranteed discount rate to the rates charged by conventional utility suppliers. Customers are billed monthly. Our customers benefit from a reduction in their current energy bills without the capital costs and risks associated with owning and operating a cogeneration or chiller system. Also, by outsourcing the management and financing of on-site energy facilities to us, they can reap the economic advantages of DG without the need for retaining specialized in-house staff with skills unrelated to their core business. Customers benefit from our On-Site Utility in a number of ways:

- Guaranteed lower price for energy
- Only pay for the energy they use
- No capital costs for equipment, engineering and installation
- No equipment operating costs for fuel and maintenance
- Immediate cash flow improvement
- Significant green impact by the reduction of carbon produced
- No staffing, operations and equipment responsibility

Our customers pay us for energy produced on site at a rate that is a certain percentage below the rate at which the utility companies provide them electrical and natural gas services. We measure the actual amount of electrical and thermal energy produced, and charge our customers accordingly. We agree to install, operate, maintain and repair our energy systems at our sole cost and expense. We also agree to obtain any necessary permits or regulatory approvals at our sole expense. Our agreements are generally for a term of 15 years, renewable for two additional five years terms upon the mutual agreement of the parties.

In regions where high electricity rates prevail, such as the Northeast, monthly payments for CHP energy services can yield attractive paybacks (e.g. often 3-5 years) on our investments in On-Site Utility projects. The price of natural gas has a minor effect on the financial returns obtained from our energy service contracts because the value of hot water and other thermal services produced from the recovered heat generated by the internal combustion engine in our on-site DG system will increase in proportion to higher fuel costs. This recovered energy, which comprises up to 60 % of the total heating value of fuel supplied to our CHP equipment, displaces fuel that would otherwise be burned in conventional boilers. Each of our customer sites becomes a profit center. The example below presents the energy supplied by two 75 kW cogeneration units and the economics of a typical energy service contract where we supply 80% of the site’s heat and hot water and 45% of the site’s electricity:

	<u>Annual</u>	<u>Term (15 years)</u>
American DG Energy Revenue	\$ 284,000	\$ 4,908,000
American DG Energy Gross Margin	\$ 84,000	\$ 1,456,000
Customer Savings	\$ 32,000	\$ 545,000

The example reflects an American DG Energy investment of \$345,000 with a payback in 4 years or a 25% internal rate of return. The example also reflects a 2% of expected annual increase in energy costs that should occur over the 15-year period.

Since inception in 2001 and through December 31, 2008, the company has entered into 43 agreements for the supply of on-site energy services, primarily with healthcare, housing facilities, apartments and athletic facilities in the Northeast.

***Energy Producing Products***

We typically offer cogeneration units sized to produce 75 kW to 100 kW of electricity and water chillers sized to produce 200 to 400 tons of cooling. For cogeneration, we prefer a modular design approach to allow us to group multiple units together to serve customers with considerably larger power requirements. Often, cogeneration units are conveniently dispersed within a large operation, such as a hospital or campus, serving multiple process heating systems that would

otherwise be impractical to serve from a single large machine. The equipment we select often yield overall energy efficiencies in excess of 80% (from our equipment supplier's specifications).

Many other DG technologies are challenged by technical, economic and reliability issues associated with systems that generate power using solar, micro-turbine or fuel cell technologies, which have not yet proven to be economical for typical customer needs. When alternative energy technologies mature to the point that they are both reliable and economical, we will employ them for the best-fit applications.

### ***Service and Installation***

Where appropriate, we utilize the best local service infrastructure for the equipment we deploy. We require long-term maintenance contracts and ongoing parts sales. Our centralized remote monitoring capability allows us to keep track of our equipment in the field. Our installations are performed by local contractors with experience in energy cogeneration systems.

For the occasional customers that want to own the CHP system themselves, we offer our "turn-key" option whereby we provide equipment, systems engineering, installation, interconnect approvals, on-site labor and startup services needed to bring the complete CHP system on-line. For some customers, we are also paid a fee to operate the systems and may receive a portion of the savings generated from the equipment.

### ***Other Funding and Revenue Opportunities***

American DG Energy is able to participate in the demand response market and receive payments due to the availability of our energy systems. Demand response programs provide payments for either the reduction of electricity usage or the increase in electricity production during periods of peak usage throughout a utility territory. We have also received grants and incentives from state organizations and natural gas companies for our installed energy systems.

### **Sales and Marketing**

Our On-Site Utility services are sold directly to end-users by our in-house marketing team and by established sales agents and representatives. We offer standardized packages of energy, equipment and services suited to the needs of property owners and operators in healthcare, hospitality, large residential, athletic facilities and certain industrial sites. This includes national accounts and other customer groups having a common set of energy requirements at multiple locations.

Our energy offering is translated into direct financial gain for our clients, and is best appreciated by senior management. These clients recognize the gain in cash flow, the increase in net income and the preservation of capital we offer. As such, our energy sales are focused on reaching these decision makers. Additionally, we have benefited with increased sales and maintenance support through our joint venture, called American DG NY LLC, or ADGNY, with AES-NJ Cogen Co., or AES-NJ, an established developer of small cogeneration systems.

The company is continually expanding its sales efforts by developing joint marketing initiatives with key suppliers to our target industries. Particularly important are our collaborative programs with natural gas utility companies. Since the economic viability of any CHP project is critically dependent upon effective utilization of recovered heat, the insight of the gas supplier to the customer energy profile is particularly effective in prospecting the most cost-effective DG sites in any region.

DG is enjoying growing support among state utility regulators seeking to increase the reliability of electricity supply with cost effective environmentally responsible demand-side resources. New York, New Jersey, Connecticut and Massachusetts are among the states that encourage DG through inter-connecting standards, incentives and/or supply planning. Unlike large central station power plants, DG investments can be made in small increments and with lead-times as short as just a few months.

The U.S. government has been developing and refining various funding opportunities related to its economic recovery or stimulus initiatives. While the final decision has not been determined as of the date of this Annual Report on Form 10-K, it appears that "shovel ready" projects related to energy and the environment will hold great prominence. Also, there appears to be interest in upgrading government buildings. The company's CHP systems would fit very well with any of these programs. Other than funding opportunities related to the economic recovery or stimulus initiatives, there does not appear to be any new government regulations that will affect the company.

## **Competition**

We believe that the main competition for our DG products is the established electric utility infrastructure. DG is beginning to gain acceptance in regions where energy customers are dissatisfied with the cost and reliability of traditional electricity service. These end-users, together with growing support from state legislatures and regulators, are creating a favorable climate for the growth of DG that is overcoming the objections of established utility providers. In our target markets, we compete with large utility companies such as Consolidated Edison in New York City and Westchester County, Long Island Power Authority in Long Island, New York, Public Service Gas and Electric in New Jersey, and NSTAR and National Grid in Massachusetts.

Engine manufacturers sell DG units that range in size from a few kW's to many MW's in size. Those manufacturers are predominantly greater than 1 MW and include Caterpillar, Cummins, and Waukesha. In many cases, we view these companies as potential suppliers of equipment and not as competitors. For example, we are currently installing a Waukesha unit at a customer site.

The alternative energy market is emerging rapidly. Many companies are developing alternative and renewable energy sources including solar power, wind power, fuel cells and micro-turbines. Some of the companies in this sector include General Electric, BP, Shell, Sun Edison and Evergreen Solar (in the solar energy space); Plug Power and Fuel Cell Energy (in the fuel cell space); and Capstone, Ingersoll Rand and Elliott Turbomachinery (in the micro-turbine space). The effect of these developing technologies on our business is difficult to predict; however, when their technologies become more viable for our target markets, we may be able to adopt their technologies into our business model.

There are a number of energy service companies that offer related services. These companies include Siemens, Honeywell and Johnson Controls. In general, these companies seek large, diverse projects for electric demand reduction for campuses that include building lighting and controls, and electricity (in rare occasions) or cooling. Because of their overhead structures, these companies often solicit large projects and stay away from individual properties. Since we focus on smaller projects for energy supply, we are well suited to work in tandem with these companies when the opportunity arises.

There are also a few local emerging cogeneration developers and contractors that are attempting to offer services similar to ours. To be successful, they will need to have the proper experience in equipment and technology, installation contracting, equipment maintenance and operation, site economic evaluation, project financing and energy sales plus the capability to cover a broad region.

## **Material Contracts**

In January 2006, the company entered into the 2006 Facilities, Support Services and Business Agreement, or the Agreement, with Tecogen, to provide the company with certain office and business support services for a period of one year, renewable annually by mutual agreement. The company also shares personnel support services with Tecogen. The company is allocated its share of the cost of the personnel support services based upon the amount of time spent by such support personnel while working on the company's behalf. To the extent Tecogen is able to do so under its current plans and policies, Tecogen includes the company and its employees in several of its insurance and benefit programs. The costs of these programs are charged to the company on an actual cost basis. Under this agreement, the company receives pricing based on a volume discount if it purchases cogeneration and chiller products from Tecogen. For certain sites, the company hires Tecogen to service its Tecogen chiller and cogeneration products. In January and May 2008, we amended the Agreement with Tecogen. Under the amendments, Tecogen provides the company with office space and utilities at a monthly rate of \$2,053 and \$2,780, respectively. Subsequent to year-end, on January 2009, the company assumed additional space and amended the office space and utilities to a monthly rate of \$4,838.

We have sales representation rights to Tecogen's products and services. In New England, we have exclusive sales representation rights to their cogeneration products. We have granted Tecogen sales representation rights to our On-Site Utility energy service in California.

## **Government Regulation**

We are not subject to extensive government regulation. We are required to file for local construction permits (electrical, mechanical and the like) and utility interconnects, and we must make various local and state filings related to environmental emissions.

The U.S. government has been developing and refining various funding opportunities related to its economic recovery or stimulus initiatives. While the final decision has not been determined as of the date of this Annual Report on Form 10-K, it appears that "shovel ready" projects related to energy and the environment will hold great prominence. Also, there appears to be interest in upgrading government buildings. The company's CHP systems would fit very well with any of

these programs. Other than funding opportunities related to the economic recovery or stimulus initiatives, there does not appear to be any new government regulations that will affect the company.

## **Employees**

As of December 31, 2008, we employed eleven active full-time employees and two part-time employees. We believe that our relationship with our employees is satisfactory. None of our employees are represented by a collective bargaining agreement.

### **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 “Warning Concerning Forward-Looking Statements” before deciding whether to invest in our securities.

#### **We have incurred losses, and these losses may continue.**

We have incurred losses in each of our fiscal years since inception. Losses continued to be incurred in 2008. There is no assurance that profitability will be achieved in the near term, if at all.

#### **Because unfavorable utility regulations make the installation of our systems more difficult or less economical, any slowdown in the utility deregulation process would be an impediment to the growth of our business.**

In the past, many electric utility companies have raised opposition to DG, a critical element of our On-Site Utility business. Such resistance has generally taken the form of unrealistic standards for interconnection, and the use of targeted rate structures as disincentives to combined generation of on-site power and heating or cooling services. A DG company’s ability to obtain reliable and affordable back-up power through interconnection with the grid is essential to our business model. Utility policies and regulations in most states are often not prepared to accommodate widespread on-site generation. These barriers erected by electric utility companies and unfavorable regulations, where applicable, make more difficult or uneconomic our ability to connect to the electric grid at customer sites and are an impediment to the growth of our business. Development of our business could be adversely affected by any slowdown or reversal in the utility deregulation process or by difficulties in negotiating backup power supply agreements with electric providers in the areas where we intend to do business.

#### **Our onsite utility concept is largely unproven and may not be accepted by a sufficient number of customers.**

The sale of cogeneration and cooling equipment has been successfully carried out for more than a decade. However, our On-Site Utility concept (i.e., the sale of on-site energy services, rather than equipment) is still in an early stage of implementation. Unresolved issues include the pricing of energy services and the structuring of contracts to provide cost savings to customers and optimum financial returns to us. There is no assurance that we will be successful in developing a profitable On-Site Utility business model, and failure to do so would have a material adverse effect on our business and financial performance.

#### **The economic viability of our projects depends on the price spread between fuel and electricity, and the variability of the prices of these components creates a risk that our projects will be uneconomic.**

The economic viability of DG projects is dependent upon the price spread between fuel and electricity prices. Volatility in one component of the spread, the cost of natural gas and other fuels (e.g., propane or distillate oil) can be managed to a greater or lesser extent by means of futures contracts. However, the regional rates charged for both base load and peak electricity services may decline periodically due to excess capacity arising from over-building of utility power plants or recessions in economic activity. Any sustained weakness in electricity prices could significantly limit the market for our cogeneration, cooling equipment and On-Site Utility energy services.

#### **We may fail to make sales to certain prospective customers because of resistance from facilities management personnel to the outsourcing of their service function.**

Any outsourcing of non-core activities by institutional or commercial entities will generally lead to reductions in permanent on-site staff employment. As a result, our proposals to implement On-Site Utility contracts are likely to encounter strong initial resistance from the facilities managers whose jobs will be threatened by energy outsourcing. The growth of our business will depend upon our ability to overcome such barriers among prospective customers.

**Future government regulations, such as increased emissions standards, safety standards and taxes, may adversely impact the economics of our business.**

The operation of DG equipment at our customers' sites may be subject to future changes in federal, state and local laws and regulations (e.g., emissions, safety, taxes, etc.). Any such new or substantially altered rules and standards may adversely affect our revenues, profits and general financial condition.

**If we cannot expand our network of skilled technical support personnel, we will be unable to grow our business.**

Each additional customer site for our services requires the initial installation and subsequent maintenance and service of equipment to be provided by a team of technicians skilled in a broad range of technologies, including combustion, instrumentation, heat transfer, information processing, microprocessor controls, fluid systems and other elements of DG. If we are unable to recruit, train, motivate, sub-contract, and retain such personnel in each of the regional markets where our business operates we will be unable to grow our business in those markets.

**The company operates in highly competitive markets and may be unable to successfully compete against competitors having significantly greater resources and experience.**

Our business may be limited by competition from energy services companies arising from the breakup of conventional regulated electric utilities. Such competitors, both in the equipment and energy services sectors, are likely to have far greater financial and other resources than us, and could possess specialized market knowledge with existing channels of access to prospective customer locations. We may be unable to successfully compete against those competitors.

**Future technology changes may render obsolete various elements of equipment comprising our On-Site Utility installations.**

We must select equipment for our DG projects so as to achieve attractive operating efficiencies, while avoiding excessive downtimes from the failure of unproven technologies. If we are unable to achieve a proper balance between the cost, efficiency and reliability of equipment selected for our projects, our growth and profitability will be adversely impacted.

**We have limited historical operating results upon which to base projections of future financial performance, making it difficult for prospective investors to assess the value of our stock.**

Our experience is primarily on-site energy services, and we have only a few years of actual operating experience. These limitations make developing financial projections more difficult. We will expand our business infrastructure based on these projections. If these projections prove to be inaccurate, we will sustain additional losses and will jeopardize the success of our business.

**We will need to raise additional capital for our business, which will dilute existing shareholders.**

Additional financings will be required to implement our overall business plan. We will need additional capital. Equity financings will dilute the percentage ownership of our existing shareholders. Our ability to raise an adequate amount of capital and the terms of any capital that we are able to raise will be dependent upon our progress in implementing demonstration projects and related marketing service development activities. If we do not make adequate progress, we may be unable to raise adequate funds, which will limit our ability to expand our business. If the terms of any equity financings are unfavorable, the dilutive impact on our shareholders might be severe.

**We may make acquisitions that could harm our financial performance.**

In order 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.

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

George Hatsopoulos and John Hatsopoulos, who are brothers, beneficially own a majority 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 shareholder approval, including a merger, consolidation and sale of substantially all of our assets or other change of control transaction. The concurrence of our minority shareholders will not be required for any of these decisions.

**We may be exposed to substantial liability claims if we fail to fulfill our obligations to our customers.**

We enter into contracts with large commercial and not-for-profit customers under which we will assume responsibility for meeting a portion of the customers' building energy demand and equipment installation. We may be exposed to substantial liability claims if we fail to fulfill our obligations to customers. There can be no assurance that we will not be vulnerable to claims by customers and by third parties that are beyond any contractual protections that we are able to negotiate. We may be unable to obtain liability and other insurance on terms and at prices that are commercially acceptable to us. As a result, liability claims could cause us significant financial harm.

**Investment in our common stock is subject to price fluctuations which have been significant for development stage companies like us.**

Historically, valuations of many companies in the development stage have been highly volatile. The securities of many of these companies have experienced significant price and trading volume fluctuations, unrelated to the operating performance or the prospects of such companies. If the conditions in the equity markets further deteriorate, we may be unable to finance our additional funding needs in the private or the public markets. 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.

**Our common stock is quoted on the OTC Bulletin Board, or OTCBB, which may have an unfavorable impact on our stock price and liquidity.**

Our common stock is quoted on the OTCBB. The OTCBB is a regulated quotation service that displays real-time quotes, last-sale prices and volume information in over-the-counter equity securities. An over-the-counter equity security generally is any equity that is not listed or traded on NASDAQ or a national securities exchange. The OTCBB is a significantly more limited market than the New York Stock Exchange or NASDAQ system. The quotation of our shares on the OTCBB may result in a less liquid market available for existing and potential stockholders to trade shares of our common stock, could depress the trading price of our common stock and could have a long-term adverse impact on our ability to raise capital in the future. Trading in stock quoted on the OTCBB is often thin and characterized by wide fluctuations in trading prices, due to many factors that may have little to do with our operations or business prospects. Moreover, the OTCBB is not a stock exchange, and trading of securities on the OTCBB is often more sporadic than the trading of securities listed on a quotation system or a stock exchange.

**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 existing stockholders of shares of common stock in the market or the perception that these sales could occur. 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 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 your sole

source of gain for the foreseeable future. We currently expect to retain earnings for use in the operation and expansion of our business, and therefore do not anticipate paying any cash dividends for the foreseeable future.

**Our ability to access capital for the repayment of debts and for future growth is limited as the financial markets are currently in a period of disruption and recession and the company does not expect these conditions to improve in the near future.**

Currently and throughout 2008, the financial markets have experienced very difficult conditions and volatility as well as significant adverse trends. The deteriorating conditions in these markets have resulted in a decrease in availability of corporate credit and liquidity and have led indirectly to the insolvency, closure or acquisition of a number of major financial institutions and have contributed to further consolidation within the financial services industry. A continued recession or a depression could adversely affect the financial condition and results of operations of the company. More specifically, these market conditions could also adversely affect the amount of revenue we report, require us to increase our allowances for losses, result in impairment charges and valuation allowances that decrease our net income and equity, and reduce our cash flows from operations. Furthermore, 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.

**Trading of our common stock is restricted by the Securities and Exchange Commission's, or the SEC's, "penny stock" regulations which may limit a stockholder's ability to buy and sell our stock.**

The SEC has adopted regulations which 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 are 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 discourage investor interest in and limit the marketability of our capital stock. Trading of our capital stock is restricted by the SEC's "penny stock" regulations which may limit a stockholder's ability to buy and sell our stock.

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

As of the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer have performed an evaluation of controls and procedures and concluded that our controls are effective to give reasonable assurance that the information required to be disclosed by our company in reports that we file under the Securities Exchange Act of 1934, as amended, or the Exchange Act, is recorded, processed, summarized and reported as when required. However, there is a lack of segregation of duties at the company due to the small number of employees dealing with general administrative and financial matters. Furthermore, the company did not have personnel with an appropriate level of accounting knowledge, experience and training in the selection, application and implementation of U.S. Generally Accepted Accounting Principles, or GAAP, as it relates to complex transactions and financial reporting requirements. 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.

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

None.

**Item 2. Properties.**

Our headquarters are located in Waltham, Massachusetts and consist of 2,702 square feet of office and storage space that are leased from Tecogen. The lease expires on March 31, 2014. We believe that our facilities are appropriate and adequate for our current needs.

**Item 3. Legal Proceedings.**

We are not currently a party to any material litigation, and we are not aware of any pending or threatened litigation against us that could have a material adverse affect on our business, operating results or financial condition.

**Item 4. Submission of Matters to a Vote of Security Holders.**

None.

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

**Market**

Our common stock started trading on November 8, 2007 on the OTCBB under the symbol "ADGE". OTCBB market quotations reflect inter-dealer prices, without retail mark-up, mark-down or commissions and may not necessarily represent actual transactions. During the period ended December 31, 2007, the high price was \$1.25 and the low price was \$0.83 as reported by the OTCBB. The following table sets forth the high and low per share sales prices for our common stock for each of the quarters in the period beginning January 1, 2008 through December 31, 2008 as reported by the OTCBB.

<u>Quarter Ended</u>	<u>High</u>	<u>Low</u>
March 31, 2008	\$ 1.09	\$ 0.73
June 30, 2008	\$ 1.92	\$ 1.01
September 30, 2008	\$ 2.05	\$ 1.35
December 31, 2008	\$ 2.31	\$ 1.65

The closing price of our common stock as reported on the OTCBB on March 16, 2009 was \$1.70.

**Holders**

As of March 16, 2009, there were approximately 71 holders of record of our common stock. As of March 16, 2009, there were approximately 243 beneficial holders of our common stock.

**Dividends**

We have never declared or paid any cash dividends on shares of our common stock. We currently intend to retain earnings, if any, to fund the development and growth of our business and do not anticipate paying cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, cash needs and growth plans.

**Recent Sales of Unregistered Securities**

Set forth below is information regarding common stock issued, warrants issued and stock options granted by the company during fiscal year 2008. Also included is the consideration, if any, we received and information relating to the section of the Securities Act of 1933, as amended, or the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

*Common Stock and Warrants*

In 2008, the company raised \$707,000 through the exercise of 1,010,000 warrants at a price of \$0.70 per share. The warrant exercises were done exclusively by 17 accredited investors, representing 3.1% of the total shares then outstanding.

In 2008, two holders of the company's 8% Convertible Debenture, elected to convert \$150,000 of the outstanding principal amount of the debenture into 178,572 shares of common stock.

On February 24, 2009, the company sold a warrant to purchase shares of the company's common stock to an accredited investor, for a purchase price of \$10,500. The warrant, which expires on February 24, 2012, gives the investor the right but not the obligation to purchase 50,000 shares of the company's common stock at an exercise price per share of \$3.00.

All of such investors were accredited investors, and such transactions were exempt from registration under the Securities Act under Section 4(2) and/or Regulation D thereunder.

*Restricted Stock Grants*

In December 2008, the company made a restricted stock grant to one employee by permitting him to purchase an aggregate of 40,000 shares of common stock, representing 0.1% of the total shares then outstanding at a price of \$0.001 per share. Those shares have a vesting schedule of four years.

Such transactions were exempt from registration under the Securities Act under Section 4(2), Regulation D and/or Rule 701 thereunder.

#### *Stock Options*

In December 2008, the company granted nonqualified options to purchase 100,000 shares of the common stock to one employee at \$1.95 per share. Those options have a vesting schedule of 4 years and expire in 10 years. The grant of such options was exempt from registration under Rule 701 under the Securities Act.

No underwriters were involved in the foregoing sales of securities. All purchasers of shares of our convertible debentures and warrants described above represented to us in connection with their purchase that they were accredited investors and made customary investment representations. All of the foregoing securities are deemed restricted securities for purposes of the Securities Act.

#### **Rule 144**

Under Rule 144 under the Securities Act, in general, a person who is not deemed to have been one of our affiliates at any time during the 90 days preceding a sale, and who has beneficially owned shares of our common stock for more than six months but less than one year would be entitled to sell an unlimited number of shares. Sales under Rule 144 during this time period are still subject to the requirement that current public information is available about us for at least 90 days prior to the sale. After such person beneficially owns shares of our common stock for a period of one year or more, the person is entitled to sell an unlimited number of shares without complying with the public information requirement or any of the other provisions of Rule 144. As of March 20, 2009, 843,572 shares of common stock held by non-affiliates were eligible for resale under amended Rule 144.

#### **Item 6. Selected Financial Data.**

Not applicable.

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

*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" beginning on page 10 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.*

Recently, there has been a slowdown in the economy, a decline in the availability of financing from the capital markets, and a widening of credit spreads which has, or may in the future, adversely affect us to varying degrees. Such conditions may impact our ability to meet obligations to our suppliers and other third parties. These market conditions could also adversely affect the amount of revenue we report, require us to increase our allowances for losses, result in impairment charges and valuation allowances that decrease our net income and equity, and reduce our cash flows from operations. In addition, these conditions or events could impair our credit rating and our ability to raise additional capital.

#### **Overview**

We derive sales from selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term energy sales agreements (with a typical term of 10 to 15 years). The energy systems are owned by us and are installed in our customers' buildings. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from our customers' local energy utility, to derive the value of our monthly energy sale, less the applicable negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers' local energy utility that

month. Our revenues commence as new energy systems become operational. As of December 31, 2008, we had 56 energy systems operational.

As a by-product of our energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy. In this case, we account for 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, regardless of the percentage of completion. In certain instances, revenue from unresolved claims is recorded when, in the opinion of management, realization of such revenue is probable and can be reliably estimated, only to the extent of actual costs incurred. Otherwise, revenue from claims is recorded in the year in which such claims are resolved. Costs and estimated earnings in excess of related billings represents the excess of contract costs and profit recognized to date on the percentage-of-completion accounting method over billings to date on certain contracts. Billings in excess of related costs and estimated earnings represents the excess of billings to date over the amount of contract costs and profits recognized to date on the percentage-of-completion accounting method for certain contracts. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the company. Any resulting gain on these transactions is recognized over the payment period in the accompanying consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

We have experienced total net losses since inception of approximately \$9.7 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as our management executes our current business plan. The cash and cash equivalents available at December 31, 2008 will provide sufficient working capital to meet our anticipated expenditures including installations of new equipment for the next twelve months; however, as we continue to grow our business by adding more energy systems, the cash requirements will increase. We believe that our cash and cash equivalents available at December 31, 2008 and our ability to control certain costs, including those related to general and administrative expenses, will enable us to meet our anticipated cash expenditures through January 1, 2010. Beyond January 1, 2010, we may need to raise additional capital through a debt financing or equity offering to meet our operating and capital needs. There can be no assurance, however, that we will be successful in our fundraising efforts or that additional funds will be available on acceptable terms, if at all.

In 2008, we raised \$707,000 through the exercise of various warrants. If we are unable to raise additional capital in 2010 we may need to terminate certain of our employees and adjust our current business plan. Financial considerations may cause us to modify planned deployment of new energy systems and we may decide to suspend installations until we are able to secure additional working capital. We will evaluate possible acquisitions of, or investments in, businesses, technologies and products that are complementary to our business; however, we are not currently engaged in such discussions.

The company's operations are comprised of one business segment. Our business is selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements. The preparation of financial statements in conformity with GAAP 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.

### **Recent Accounting Pronouncements**

In December 2007, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards No. 141(R) "Business Combinations", or SFAS No. 141(R), which requires changes in the accounting and reporting of business acquisitions. The statement requires an acquirer to recognize the assets acquired, the liabilities assumed, and any noncontrolling interest in purchased entities, measured at their fair values at the date of acquisition based upon the definition of fair value outlined in Statement of Financial Accounting Standards No. 157, or SFAS No. 157. SFAS No. 141(R) is effective for the company for acquisitions that occur beginning in 2009. The effects of SFAS No. 141(R) on our financial statements will depend on the extent that the company makes business acquisitions in the future.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 160, "Noncontrolling Interests in Consolidated Financial Statements an Amendment of ARB No. 51", or SFAS No. 160, which requires changes in the accounting and reporting of noncontrolling interests in a subsidiary, also known as minority interest. The statement clarifies that a minority interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. SFAS No. 160 is effective for the company at the beginning of 2009. The company is continuing to review provisions of SFAS No. 160, which is effective the first quarter of fiscal 2009 and expects

this new accounting standard to result in changes in the presentation of minority interests in the financial statements consistent with the new standard.

In February 2008, the FASB issued FASB Staff Position No. 157-2, or FSP No. 157-2, which delays the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 establishes a framework for measuring fair value and expands disclosures about fair value measurements. FSP No. 157-2 partially defers the effective date of SFAS No. 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of this FSP No. 157-2. The adoption of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities is effective for us beginning January 1, 2009. The company does not expect SFAS No. 157 to have a material impact on its results of operations and financial condition.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, “Disclosures about Derivative Instruments and Hedging Activities — an amendment of Statement of Financial Accounting Standards No. 133”, or SFAS No. 161. SFAS No. 161 changes the disclosure requirements for derivative instruments and hedging activities. This standard requires enhanced disclosures about how and why an entity uses derivative instruments, how instruments are accounted for under Statement of Financial Accounting Standards No. 133, “Accounting for Derivative Instruments and Hedging Activities,” and how derivatives and hedging activities affect an entity’s financial position, financial performance and cash flows. This standard is effective for fiscal years beginning after November 15, 2008. The company does not expect SFAS No. 161 to have a material impact on its results of operations and financial condition.

In May 2008, FASB issued Statement of Financial Accounting Standards No. 162, “The Hierarchy of Generally Accepted Accounting Principles”, or SFAS No. 162. SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity with GAAP in the U.S. SFAS No. 162 is effective 60 days following the SEC’s approval of the Public Company Accounting Oversight Board amendments to AU Section 411, “The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles.” The company does not expect SFAS No. 162 to have a material impact on its results of operations and financial condition.

### **Critical Accounting Policies**

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, the reported amounts of revenues and expenses during the reporting period, and the disclosure of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates. Management believes the following critical accounting policies involve more significant judgments and estimates used in the preparation of our consolidated financial statements.

#### *Partnerships, Joint Ventures and Entities under Common Control*

Certain contracts are executed jointly through partnerships and joint ventures with unrelated third parties. The company consolidates all joint ventures and partnerships in which it owns, directly or indirectly, 50% or more of the membership interests. All significant intercompany accounts and transactions are eliminated. Minority interest in net assets and earnings or losses of consolidated entities are reflected in the caption “Minority interest” in the accompanying consolidated financial statements. Minority interest adjusts the consolidated results of operations to reflect only the company’s share of the earnings or losses of the consolidated entities. Upon dilution of ownership below 50%, the accounting method is adjusted to the equity or cost method of accounting, as appropriate.

FASB Interpretation No. 46 (Revised), “Consolidation of Variable Interest Entities”, or FIN No. 46-R, provides the principles to consider in determining when variable interest entities must be consolidated in the financial statements of the primary beneficiary. In general, a variable interest entity is an entity used for business purposes that either (a) does not have equity investors with voting rights, or (b) has equity investors that are not required to provide sufficient financial resources for the entity to support its activities without additional subordinated financial support. FIN No. 46-R requires a variable interest entity to be consolidated by a company if that company is subject to a majority of the risk of loss from the variable interest entity’s activities or is entitled to receive a majority of the entity’s residual returns, or both. A company that consolidates a variable interest entity is called the primary beneficiary of that entity. The company evaluates the applicability of FIN No. 46-R to partnerships and joint ventures at the inception of its participation to ensure its accounting is in accordance with the appropriate standards.

The company has a variable interest in Tecogen through its contractual interests in that entity; however, the company is not the primary beneficiary and does not have any exposure to loss as a result of its involvement with Tecogen. See the Note 7 - Related Party footnote to the company's consolidated financial statement for discussion of the company's involvement with Tecogen.

#### *Related Party Transactions*

The company purchases the majority of its cogeneration units from Tecogen, an affiliate company sharing similar ownership. In addition, Tecogen pays certain operating expenses, including benefits and payroll, on behalf of the company and the company leases office space from Tecogen. These costs were reimbursed by the company. Tecogen has a sublease agreement for the office building, which expires on March 31, 2014.

On January 1, 2008, via amendment No.1, and on May 15, 2008, via amendment No.2, the company amended its Agreement with Tecogen that provide with certain office and business support services for a period of one year, renewable annually by mutual agreement. The amendments revised the rent allocation whereby Tecogen provides the company with office space and utilities to a flat rate of \$2,053 and \$2,780 per month, respectively. Subsequent to year-end, on January 1, 2009, via amendment No.3 the company assumed additional space and revised the rent allocation to a flat rate of \$4,838 per month.

The company has sales representation rights to Tecogen's products and services. In New England, the company has exclusive sales representation rights to Tecogen's cogeneration products. The company has granted Tecogen sales representation rights to its On-Site Utility energy service in California.

On February 15, 2007, the company loaned the minority interest partner in the ADGNY \$20,000 by signing a two year loan agreement earning interest at 12% per annum. On April 1, 2007, the company loaned an additional \$75,000 to the same minority interest partner by signing a two year note agreement earning interest at 12% per annum, and on May 16, 2007, the company loaned an additional \$55,000 to the same partner by signing a two year note agreement under the same terms. All notes are classified in the *Due from related party* account in the accompanying balance sheet and are secured by the partner's minority interest. On October 11, 2007, we extended to our minority interest partner a line of credit of \$500,000. At December 31, 2008, \$265,012 was outstanding and due to the company under the combination of the above agreements.

Our Chief Financial Officer devotes part of his business time to the affairs of GlenRose Instruments Inc., or GlenRose, and part of his salary is reimbursed by GlenRose. Also, our Chief Executive Officer is the Chairman of the Board and a significant investor in GlenRose and did not receive a salary, bonus or any other compensation from GlenRose in 2008.

#### *Property and Equipment and Depreciation and Amortization*

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line and accelerated methods at rates sufficient to write off the cost of the applicable assets over their estimated useful lives. Repairs and maintenance are expensed as incurred.

The company evaluates the recoverability of its long-lived assets in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", or SFAS No. 144. SFAS No. 144 requires the recognition of impairment of long-lived assets in the event the net book value of such assets exceeds the estimated future undiscounted cash flows attributable to such assets. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis. The company reviews long-lived assets for impairment annually or whenever events or changes in business circumstances indicate that the carrying value of the assets may not be fully recoverable or that the useful lives of the assets are no longer appropriate. At December 31, 2008 the company determined that its long-lived assets are recoverable.

#### *Stock-Based Compensation*

Effective January 1, 2006, we adopted Statement of Financial Accounting Standards No. 123 (revised 2004), "Share Based Payment", or SFAS No. 123(R), which is a revision of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation", or SFAS No. 123. SFAS No. 123(R) supersedes Accounting Principles Board No. 25, "Accounting for Stock Issued to Employees", or APB No. 25, and Statement of Financial Accounting Standards No. 95 "Statement of Cash Flows", or SFAS No. 95. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative.



SFAS No. 123(R) requires nonpublic companies that used the minimum value method in SFAS No. 123 for either recognition or pro forma disclosures to apply SFAS No. 123(R) using the prospective-transition method. As such, since we were not a public company as of the adoption date, we will continue to apply APB No. 25 in future periods to equity awards outstanding at the date of SFAS No. 123(R)'s adoption that were measured using the minimum value method.

The determination of the fair value of share-based payment awards is affected by the company's stock price. Since inception and until November 7, 2007, since the company was not publicly traded, the company considered the sales price of common stock in private placements to unrelated third parties as a measure of the fair value of its common stock. The company started trading on November 8, 2007, therefore after such date, it will use the market price of its common stock to determine fair value of share-based payment awards.

SFAS No. 123(R) also requires companies to utilize an estimated forfeiture rate when calculating the expense for the period, whereas, SFAS No. 123 permitted companies to record forfeitures based on actual forfeitures, which was our historical policy under SFAS No. 123. 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 in our financial statements in 2008 and thereafter is based on awards that are ultimately expected to vest. We evaluate the assumptions used to value our awards on a quarterly basis and if factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.

On November 10, 2005, the FASB issued Statement of Financial Accounting Standards Staff Position No. 123R-3 "Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards", or SFAS No. 123R-3. The company has elected to adopt the alternative transition method provided by the FASB Staff Position for calculating the tax effects (if any) of stock-based compensation expense pursuant to SFAS No. 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the additional paid-in capital pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS No. 123(R).

#### *Revenue Recognition*

Revenue from energy contracts is recognized when electricity, heat, and chilled water is produced by the cogeneration systems on-site. The company bills each month based on various meter readings installed at each site. The amount of energy produced by on-site energy systems is invoiced, as determined by a contractually defined formula. Under certain energy contracts, the customer directly acquires the fuel to power the systems and receives credit for that expense from the company. The credit is recorded as revenue and cost of fuel. We recognize revenue that relates to multiple element contracts in accordance with Emerging Issues Task Force 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables". Revenue to which this guidance applies includes a contract that consists of the sale of equipment, installation, energy and maintenance. When a sales arrangement contains multiple elements, revenue is allocated to each element based upon its relative fair value. Fair value is determined based on the price of a deliverable sold on a standalone basis.

As a by-product of our energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy. In this case, we account for 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, regardless of the percentage of completion. In certain instances, revenue from unresolved claims is recorded when, in the opinion of management, realization of such revenue is probable and can be reliably estimated, only to the extent of actual costs incurred. Otherwise, revenue from claims is recorded in the year in which such claims are resolved. Costs and estimated earnings in excess of related billings and unbilled revenue represent the excess of contract costs and profit recognized to date on the percentage-of-completion accounting method over billings to date on certain contracts. Billings in excess of related costs and estimated earnings represents the excess of billings to date over the amount of contract costs and profits recognized to date on the percentage-of-completion accounting method for certain contracts. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the company. Any resulting gain on these transactions is recognized in the consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

## *Income Taxes*

As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves us estimating our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items, such as depreciation and certain accrued liabilities for tax and accounting purposes. These differences result in deferred tax assets and liabilities, which are included within our consolidated balance sheet. We must then assess the likelihood that our deferred tax assets will be recovered from future taxable income and to the extent we believe that recovery is not likely, we must establish a valuation allowance. To the extent we establish a valuation allowance or increase this allowance in a period, we must include an expense within the tax provision in the consolidated statement of operations.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities and any valuation allowance recorded against our deferred tax assets. As of December 31, 2008, there was no deferred income tax asset on our books. We recorded a valuation allowance of \$3,056,000 against the entire gross deferred income tax asset due to uncertainties related to our ability to utilize our net operating loss carry forwards before they expire. The valuation allowance is based on our estimates of taxable income by jurisdiction in which we operate and the period over which our deferred tax assets will be recoverable. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to establish an additional valuation allowance which could materially impact our financial position and results of operations.

## **Results of Operations for the Years Ended December 31, 2008 and December 31, 2007**

### *Fiscal 2008 Compared with Fiscal 2007*

#### *Revenues*

Revenues in 2008 were \$6,579,437 as compared to \$5,847,020 for the same period in 2007, an increase of \$732,417 or 12.5%. The increase in revenues was primarily due to an increase in our core On-Site Utility energy business revenues that increased to \$5,140,503 as compared to \$3,266,915 for the same period in 2007, an increase of 57.3%.

During 2008, we were operating 56 energy systems at 30 locations in the Northeast, representing 4,240 kW of installed electricity plus thermal energy, compared to 46 energy systems at 23 locations, representing 3,120 kW of installed electricity plus thermal energy for the same period in 2007. Our revenues per customer on a monthly basis is based on the sum of the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers' local energy utility that month less the discounts we provide our customers. Our revenues commence as new energy systems become operational.

#### *Cost of Sales*

Cost of sales, including depreciation, in 2008 were \$5,733,175 as compared to \$4,583,568 for the same period in 2007, an increase of \$1,149,607 or 25.1%. Included in the cost of sales was depreciation expense of \$596,915 in 2008, compared to \$363,233 in 2007. Also included were our costs for certain turn-key installation projects. Our cost of sales for our core On-Site Utility business consists of fuel required to operate our energy systems, the cost of maintenance, and minimal communications costs. During 2008, our gross margins were 12.9% compared to 21.6% in 2007, primarily due to increased installation costs on the completion of two turn-key installation projects that were aggressively pursued in order to enter new markets. Our On-Site Utility energy margins excluding depreciation were 27.7% in 2008 as compared to 32.7% during the same period in 2007. In absolute dollars the On-Site Utility energy margin in 2008 was \$1,427,318 as compared to \$1,066,771 for the same period in 2007.

#### *Operating Expenses*

Our general and administrative expenses consist of executive staff, accounting and legal expenses, office space, general insurance and other administrative expenses. Our general and administrative expenses in 2008 were \$1,504,968 compared to \$1,423,775 in 2007, an increase of \$81,193 or 5.7%. The increase in the general and administrative expenses was primarily due to increase in travel, legal expenses and the addition of a part time employee, offset by efficient expense control. Our general and administrative expenses include non-cash compensation expense, in accordance with SFAS No. 123(R), related to the issuance of restricted stock and option awards to our employees.

Our selling expenses consist of sales staff, commissions, marketing, travel and other selling related expenses including provisions for bad debt write-offs. We sell energy using both direct sales and commissioned agents. Our marketing

efforts consisted of trade shows, print literature, media relations and event driven direct mail. Our selling expenses in 2008 were \$533,874 compared to \$415,545 in 2007, an increase of \$118,329 or 28.5%. The increase in our selling expenses was primarily due to additional sales expenses to generate new business.

Our engineering expenses consisted of technical staff and other engineering related expenses. The role of engineering is to evaluate potential customer sites based on technical and economic feasibility, manage the installed base of energy systems and oversee each new installation project. Our engineering expenses in 2008 were \$401,361 compared to \$329,139 in 2007, an increase of \$72,223 or 21.9%. The engineering expenses increased primarily due to the addition of a new engineer and a service technician.

#### *Operating Income*

Operating income in 2008 was a loss of \$1,593,941 compared to a loss of \$905,007 in 2007. The increase in the operating loss was primarily due to increased installation costs on the completion of two turn-key installation projects that were aggressively pursued in order to enter new markets. These events negatively impacted our operating income, but had no effect on our core On-Site Utility energy business. Our non-cash compensation expense in accordance with SFAS No. 123(R) related to the issuance of restricted stock and option awards to our employees was \$364,231 in 2008, compared to \$330,335 in 2007.

#### *Other Income (Expense), Net*

Our other income (expense), net, in 2008 was \$334,717 compared to \$213,050 in 2007. Other income (expense), net, includes interest income, interest expense and other items. Interest and other income was \$139,690 in 2008 compared to \$271,950 in 2007. The decrease was primarily due to a lower cash balance and due to lower yields on our invested funds. Interest expense was \$474,407 in 2008 compared to \$485,000 in 2007, due to interest on our convertible debenture issued in 2006.

#### *Provision for Income Taxes*

Due to the profitability of our joint venture ADG NY, the company had a provision for certain state taxes of \$34,087 in 2008. The tax provision in 2007 was not material. No benefit to the company's losses has been provided in either period.

#### *Minority Interest*

In 2002, the company and AES-NJ Cogen Inc. of New Jersey created ADG NY to develop projects in the New York and New Jersey area. The company owns 51% of ADGNY. Both partners in ADGNY share in the profits of the business. The percentage share of the profit is based on the partner's investment in each individual project. The company's investments in ADGNY projects have ranged from 51% to 80%. The minority interest expense represents our partner's share of profits in the entity. On our balance sheet, minority interest represents our partner's investment in the entity, plus its share of after tax profits less any cash distributions. The company reported minority interest expense of \$305,336 in 2008 and \$364,833 in 2007. The decrease in minority interest share of their earnings is due to the overall decrease in joint venture volume and profits.

#### **Liquidity and Capital Resources**

Consolidated working capital at December 31, 2008 was \$3,122,139, compared to \$5,555,696 at December 31, 2007. Included in working capital were cash, cash equivalents and short-term investments of \$2,445,112 at December 31, 2008, compared to \$5,057,482 at December 31, 2007. The decrease in working capital was a result of cash needed to fund operations.

Cash used by operating activities was \$957,469 in 2008 compared to cash used of \$1,143,080 in 2007. The company's short and long-term receivables balance, including unbilled revenue, increased to \$1,046,319, in 2008 compared to \$767,229 at December 31, 2007, due to increased sales volume, resulting in a decrease in cash of \$279,090. Amount due to the company from related parties, short and long-term, decreased to \$297,417 in 2008 compared to \$570,374 at December 31, 2007, providing \$272,957 of cash to the company due to payments received from our minority interest partner. Our prepaid and other current assets increased to \$163,121 in 2008 compared to \$77,853 at December 31, 2007, using \$85,268 of cash primarily due to prepaid insurance and prepaid taxes.

Accounts payable decreased to \$270,852 in 2008, compared to \$354,091 at December 31, 2007, using \$83,239 of cash due to timing of vendor invoices. Our accrued expenses and other current liabilities including accrued interest expense

increased to \$384,340 in 2008 compared to \$339,740 at December 31, 2007, providing \$44,600 of the company's cash offset by an accrual of \$117,500 for future interest payments. Our due to related party increased to \$166,560 in 2008 due to orders for new equipment.

During 2008, the primary investing activities of the company's operations were expenditures for the purchase of property, plant and equipment for the company's energy system installations. The company used \$2,279,782 for purchases and installation of energy systems and \$761,614 for short-term investments. The company's financing activities provided \$624,881 of cash, net of costs, in 2008 from the exercise of common stock warrants, offset by distributions to our minority interest partner.

The company's On-Site Utility energy program allows customers to reduce both their energy costs and site carbon production by deploying CHP technology on its customers' premises at no cost. Therefore the company is capital intensive. The company believes that its existing resources, including cash and cash equivalents and future cash flow from operations, are sufficient to meet the working capital requirements of its existing business for the foreseeable future, including the next 12 months. We believe that our cash and cash equivalents and our ability to control certain costs, including those related to general and administrative expenses, will enable us to meet our anticipated cash expenditures through the end of 2009. Beyond January 1, 2010, as we continue to grow our business by adding more energy systems, our cash requirements will increase. 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.

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. If these conditions continue and we cannot raise funds through a public or private debt financing, or an equity offering, our ability to grow our business may be negatively affected. In such case, the company may need to suspend any new installation of energy systems and significantly reduce its operating costs until market conditions improve.

### **Seasonality**

The majority of our heating systems sales are in the winter and the majority of our chilling systems sales are in the summer.

### **Inflation**

We install, maintain, finance, own and operate complete on-site CHP systems that supply, on a long-term, contractual basis, electricity and other energy services. We sell the energy to customers at a guaranteed discount rate to the rates charged by conventional utility suppliers. Our customers benefit from a reduction in their current energy bills without the capital costs and risks associated with owning and operating a CHP or chiller system. Inflation will cause an increase in the rates charged by conventional utility suppliers, and since we bill our customers based on the electric utility rates, our pricing will increase in tandem and positively affect our revenue. However, inflation might cause both our investment and cost of goods sold to increase, therefore lowering our return on investment and depressing our gross margins.

### **Off Balance Sheet Arrangements**

The company has no material off balance sheet arrangements.

### **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

## Item 9A(T). Controls and Procedures.

### *Management's Evaluation of Disclosure Controls and Procedures:*

Our Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of our “disclosure controls and procedures” (as defined in the Exchange Act) Rules 13a-15(e) and 15d-15(e); collectively, “Disclosure Controls”) as of the end of the period covered by this Annual Report on Form 10-K (the “Evaluation Date”) have concluded that as of the Evaluation Date, our Disclosure Controls were not effective to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC, and that material information relating to our company and any consolidated subsidiaries is made known to management, including our Chief Executive Officer and Chief Financial Officer, particularly during the period when our periodic reports are being prepared to allow timely decisions regarding required disclosure.

### *Changes in Internal Control Over Financial Reporting:*

In connection with the evaluation referred to in the foregoing paragraph, we have identified no change in our internal control over financial reporting that occurred during the year ended December 31, 2008 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

### *Report of Management 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 Exchange Act Rules 13a-15(f) and 15d-15(f). Management conducted an evaluation of our internal control over financial reporting based on the framework and criteria established in *Internal Control—Integrated Framework*, 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, 2008.

There is a lack of segregation of duties at the company due to the small number of employees dealing with general administrative and financial matters and general controls over information technology security and user access. This constitutes a material weakness in financial reporting. Furthermore, the company did not have personnel with an appropriate level of accounting knowledge, experience and training in the selection, application and implementation of GAAP as it relates to complex transactions and financial reporting requirements. At this time, management has decided that considering the employees involved and the control procedures in place, there are risks associated with such lack of segregation, but the potential benefits of adding additional employees to clearly segregate duties do not justify the expenses associated with such increases. Management will continue to evaluate this segregation of duties.

The company had 13 employees as of December 31, 2008. Other than the Chief Financial Officer, only two individuals are in the finance function, one of which is part-time. These individuals are responsible for receiving and distributing cash, billing, processing transactions, recording journal entries, reconciling accounts and preparing the financial statements and related disclosures. One individual has check signing authority for transactions under \$2,000. As a result, there is the potential for that individual to knowingly or unknowingly misappropriate assets or misstate our financial statements. To mitigate these risks, the company has put in place procedures where the Chief Executive Officer, the President and the Chief Financial Officer have check signing authority. In addition, they review and approve all material contracts, transactions and related journal entries. They are also responsible for reviewing and approving monthly financials and related reconciliations, budget to actual comparisons and the information required to be disclosed by the company in all reports filed under the Exchange Act.

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

This Annual Report on Form 10-K does not include an attestation report of the company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the company's registered public accounting firm pursuant to temporary rules of the SEC that permit the company to provide only management's report in this Annual Report on Form 10-K.

**Item 9B. Other Information.**

None.

## PART III

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

The information required by Item 10 is incorporated by reference to the our definitive Proxy Statement for our 2009 annual meeting of shareholders ("Proxy Statement"), which will be filed not later than 120 days after the end of our fiscal year.

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

The information required by Item 11 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

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

The information required by Item 12 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

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

The information required by Item 13 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

### **Item 14. Principal Accountant Fees and Services.**

The information required by Item 14 is incorporated by reference to the Proxy Statement, which will be filed not later than 120 days after the end of our fiscal year.

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

(a) Index To Financial Statements and Financial Statements Schedules:

Report of Independent Registered Public Accounting Firm Vitale, Caturano & Company, P.C. as of March 20, 2009

Consolidated Balance Sheets as of December 31, 2008 and December 31, 2007

Consolidated Statements of Operations for the years ended December 31, 2008 and December 31, 2007

Consolidated Statements of Stockholders' Equity for the years ended December 31, 2008 and December 31, 2007

Consolidated Statements of Cash Flows for the years ended December 31, 2008 and December 31, 2007

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.



b) Exhibits

Exhibit  
Number

Description

- 3.1 Certificate of Incorporation (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 3.2 By-laws (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 4.1 Form of Warrant (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 4.2 Warrant to Purchase Shares of Common Stock dated February 24, 2009 (incorporated by reference from the registrant's current report on Form 8-K, filed with the Securities and Exchange Commission on February 26, 2009).
- 10.1 Audit Committee Charter (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 10.2 Compensation Committee Charter (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 10.3 American Distributed Generated Inc. 2001 Stock Incentive Plan (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 10.4 2005 Stock Incentive Plan (incorporated by reference from our definitive proxy statement for the 2008 Annual Meeting of shareholders originally filed on April 29, 2008).
- 10.5 Facilities, Support Services and Business Agreement with Tecogen Inc. (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006. Confidential treatment has been granted for portions of this document. The confidential portions have been omitted and have been filed separately, on a confidential basis, with the Securities and Exchange Commission).
- 10.6 Amendment to Facilities, Support Services and Business Agreement with Tecogen Inc. dated April 1, 2008 (incorporated by reference from the registrant's Form 10-Q, filed with the Securities and Exchange Commission for the quarter ended March 31, 2008).
- 10.7# Amendment No. 2 to Facilities, Support Services and Business Agreement with Tecogen Inc. dated May 15, 2008.
- 10.8# Amendment No. 3 to Facilities, Support Services and Business Agreement with Tecogen Inc. dated January 2, 2009.
- 10.9 Operating Agreement of American DG New York LLC (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 10.10 Form of Energy Purchase Agreement (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 10.11 Form of 8% Senior Convertible Debenture Due 2011 (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 14.1 Code of Business Conduct and Ethics (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 21.1 List of subsidiaries (incorporated by reference from the registrant's Form 10-SB, as amended, originally filed with the Securities and Exchange Commission on October 3, 2006).
- 23.1# Consent of Vitale, Caturano & Co., P.C.
- 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

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# Filed herewith.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 20, 2009.

AMERICAN DG ENERGY INC.  
(Registrant)

By: /s/ JOHN N. HATSOPOULOS  
Chief Executive Officer  
(Principal Executive Officer)

By: /s/ ANTHONY S. LOUMIDIS  
Chief Financial Officer  
(Principal Financial Officer)

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ GEORGE N. HATSOPOULOS</u> George N. Hatsopoulos	Chairman of the Board	March 20, 2009
<u>/s/ JOHN N. HATSOPOULOS</u> John N. Hatsopoulos	Chief Executive Officer	March 20, 2009
<u>/s/ ANTHONY S. LOUMIDIS</u> Anthony S. Loumidis	Chief Financial Officer (Principal Financial and Accounting Officer)	March 20, 2009
<u>/s/ BARRY J. SANDERS</u> Barry J. Sanders	President and Chief Operating Officer	March 20, 2009
<u>/s/ EARL R. LEWIS</u> Earl R. Lewis	Director	March 20, 2009
<u>/s/ CHARLES T. MAXWELL</u> Charles T. Maxwell	Director	March 20, 2009
<u>/s/ ALAN D. WEINSTEIN</u> Alan D. Weinstein	Director	March 20, 2009

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of  
American DG Energy Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of American DG Energy Inc. and subsidiaries (collectively, the "Company") as of December 31, 2008 and December 31, 2007, 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 the consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above, present fairly, in all material respects, the financial position of the Company at December 31, 2008, and December 31, 2007, and the results of their operations and their cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

/s/ VITALE, CATURANO & CO., P.C.

Boston, Massachusetts  
March 20, 2009

**AMERICAN DG ENERGY INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**

	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
<b>ASSETS</b>		
Current assets		
Cash and cash equivalents	\$ 1,683,498	\$ 5,057,482
Short-term investments	761,614	-
Accounts receivable, net	835,922	693,818
Unbilled revenue	204,750	-
Due from related party, current	297,417	420,374
Prepaid and other current assets	163,121	77,853
Total current assets	3,946,322	6,249,527
Property, plant and equipment, net	6,983,392	5,291,310
Accounts receivable, long-term	5,647	73,411
Due from related party, long-term	-	150,000
<b>TOTAL ASSETS</b>	<b>10,935,361</b>	<b>11,764,248</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities		
Accounts payable	270,852	354,091
Accrued expenses and other current liabilities	384,340	339,740
Due to related party	166,560	-
Capital lease obligations	2,431	-
Total current liabilities	824,183	693,831
Long-term liabilities		
Convertible debentures	5,875,000	6,025,000
Capital lease obligations, long-term	14,394	-
Total liabilities	6,713,577	6,718,831
Minority interest	1,317,003	1,058,786
Stockholders' equity		
Common stock, \$0.001 par value; 50,000,000 shares authorized; 34,034,496 and 32,805,924 issued and outstanding at December 31, 2008 and December 31, 2007, respectively	34,034	32,806
Additional paid-in capital	12,614,332	11,394,289
Common stock subscription	(35,040)	-
Accumulated deficit	(9,708,545)	(7,440,464)
Total stockholders' equity	2,904,781	3,986,631
<b>TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY</b>	<b>\$ 10,935,361</b>	<b>\$ 11,764,248</b>

See accompanying notes to consolidated financial statements

**AMERICAN DG ENERGY INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**

	December 31,	
	2008	2007
Net Sales	\$ 6,579,437	\$ 5,847,020
Cost of sales		
Fuel, maintenance and installation	5,136,260	4,220,335
Depreciation expense	596,915	363,233
	5,733,175	4,583,568
Gross profit	846,262	1,263,452
Operating expenses		
General and administrative	1,504,968	1,423,775
Selling	533,874	415,545
Engineering	401,361	329,139
	2,440,203	2,168,459
Loss from operations	(1,593,941)	(905,007)
Other income (expense)		
Interest and other income	139,690	271,950
Interest expense	(474,407)	(485,000)
	(334,717)	(213,050)
Loss before minority interest and income taxes	(1,928,658)	(1,118,057)
Minority interest, net of taxes	(305,336)	(364,833)
Net loss before income taxes	(2,233,994)	(1,482,890)
Provision for state income taxes	(34,087)	-
Net loss	\$ (2,268,081)	\$ (1,482,890)
Net loss per share - basic and diluted	\$ (0.07)	\$ (0.05)
Weighted average shares outstanding - basic and diluted	32,872,006	30,698,185

See accompanying notes to consolidated financial statements

**AMERICAN DG ENERGY INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**

	Common Stock \$0.001 Par Value	Additional Paid- In Capital	Common Stock Subscription	Accumulated Deficit	Total
Balance at December 31, 2006	\$ 25,567	\$ 6,659,448	\$ 6,775	\$ (5,957,574)	\$ 734,216
Reclass of redeemable common stock	450	314,550	-	-	315,000
Conversion of convertible debenture to common stock	60	49,941	-	-	50,000
Sale of common stock, net of costs	5,682	3,886,536	-	-	3,892,218
Issuance of restricted stock	737	(210)	225	-	752
Common stock subscription	10	6,990	(7,000)	-	-
Stock based compensation expense	-	330,335	-	-	330,335
Exercise of stock options	100	6,900	-	-	7,000
Exercise of warrants	200	139,800	-	-	140,000
Net loss	-	-	-	(1,482,890)	(1,482,890)
Balance at December 31, 2007	<u>32,806</u>	<u>11,394,289</u>	<u>-</u>	<u>(7,440,464)</u>	<u>3,986,631</u>
Conversion of convertible debenture to common stock	178	149,822	-	-	150,000
Issuance of restricted stock	40	-	(40)	-	-
Stock based compensation expense	-	364,231	-	-	364,231
Exercise of warrants	1,010	705,990	(35,000)	-	672,000
Net loss	-	-	-	(2,268,081)	(2,268,081)
Balance at December 31, 2008	<u>\$ 34,034</u>	<u>\$ 12,614,332</u>	<u>\$ (35,040)</u>	<u>\$ (9,708,545)</u>	<u>\$ 2,904,781</u>

See accompanying notes to consolidated financial statements

**AMERICAN DG ENERGY INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

	December 31,	
	2008	2007
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (2,268,081)	\$ (1,482,890)
<i>Adjustments to reconcile net loss to net cash used in operating activities:</i>		
Depreciation and amortization	604,525	368,952
Gain on sale of capital assets	-	(108,219)
Minority interest in net income of consolidated subsidiaries, net of taxes	305,336	364,833
Provision for losses on accounts receivable	51,759	35,589
Amortization of deferred financing costs	8,526	8,526
Non cash interest expense	117,500	120,500
Stock-based compensation	364,231	330,335
<i>Changes in operating assets and liabilities</i>		
<i>(Increase) decrease in:</i>		
Accounts receivable	(330,849)	(518,420)
Due from related party	272,957	(298,478)
Prepaid assets	(93,794)	(1,712)
<i>Increase (decrease) in:</i>		
Accounts payable	(83,239)	238,965
Accrued expenses and other current liabilities	(72,900)	(201,061)
Due to related party	166,560	-
Net cash used in operating activities	<u>(957,469)</u>	<u>(1,143,080)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Purchases of property and equipment	(2,279,782)	(1,548,419)
Proceeds from sale of property and equipment	-	427,000
Purchase of short-term investments	(761,614)	-
Net cash used in investing activities	<u>(3,041,396)</u>	<u>(1,121,419)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from issuance of restricted stock	-	752
Proceeds from exercise of warrants	672,000	140,000
Minority distribution to consolidated subsidiaries	(47,119)	11,565
Due from related party long- term	-	(150,000)
Proceeds from sale of common stock and warrants, net of costs	-	3,892,218
Proceeds from exercise of stock options	-	7,000
Net cash provided by financing activities	<u>624,881</u>	<u>3,901,535</u>
Net (decrease) increase in cash and cash equivalents	(3,373,984)	1,637,036
Cash and cash equivalents, beginning of the year	5,057,482	3,420,446
Cash and cash equivalents, ending of the year	<u>\$ 1,683,498</u>	<u>\$ 5,057,482</u>
<b>Supplemental disclosures of cash flows information:</b>		
Cash paid during the year for:		
Interest	<u>\$ 477,422</u>	<u>\$ 485,000</u>
Income taxes	<u>\$ 86,130</u>	<u>\$ 28,144</u>
<b>Non-cash investing and financing activities:</b>		
Conversion of convertible debenture to common stock	<u>\$ 150,000</u>	<u>\$ 50,000</u>
Acquisition of equipment under capital lease	<u>\$ 16,825</u>	<u>\$ -</u>

See accompanying notes to consolidated financial statements



## NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

**Note 1 — The company and basis of presentation:**

American DG Energy Inc. (“American DG Energy”, the “company”, “us” or “we”) distributes and operates on-site cogeneration systems that produce both electricity and heat. Our business is to own the equipment that we install at customers’ facilities and to sell the energy produced by these systems to the customers on a long-term contractual basis. We call this business the American DG Energy “On-Site Utility”.

The company was incorporated as a Delaware corporation on July 24, 2001 to install, own, operate and maintain complete DG systems and other complementary systems at customer sites and sell electricity, hot water, heat and cooling energy under long-term contracts at prices guaranteed to the customer to be below conventional utility rates. As of December 31, 2008, we had installed energy systems, representing approximately 4,240 kilowatts, or kW, 32.4 million British thermal units, or MMBtu’s, of heat and hot water and 600 tons of cooling. Kilowatt is a measure of electricity generated, MMBtu is a measure of heat generated and a ton is a measure of cooling generated.

We derive sales from selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term energy sales agreements (with a typical term of 10 to 15 years). The energy systems are owned by us and are installed in our customers’ buildings. Each month we obtain readings from our energy meters to determine the amount of energy produced for each customer. We multiply these readings by the appropriate published price of energy (electricity, natural gas or oil) from our customers’ local energy utility, to derive the value of our monthly energy sale, less the applicable negotiated discount. Our revenues per customer on a monthly basis vary based on the amount of energy produced by our energy systems and the published price of energy (electricity, natural gas or oil) from our customers’ local energy utility that month. Our revenues commence as new energy systems become operational. As of December 31, 2008, we had 56 energy systems operational.

As a by-product of our energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy. In this case we account for 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, regardless of the percentage of completion. Costs and estimated earnings in excess of related billings and unbilled revenue represent the excess of contract costs and profit recognized to date on the percentage-of-completion accounting method over billings to date on certain contracts. Billings in excess of related costs and estimated earnings represents the excess of billings to date over the amount of contract costs and profits recognized to date on the percentage-of-completion accounting method for certain contracts. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the company. Any resulting gain on these transactions is recognized in the consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

We have experienced total net losses since inception of approximately \$9.7 million. For the foreseeable future, we expect to experience continuing operating losses and negative cash flows from operations as our management executes our current business plan. The cash and cash equivalents available at December 31, 2008 will provide sufficient working capital to meet our anticipated expenditures including installations of new equipment for the next twelve months; however, as we continue to grow our business by adding more energy systems, the cash requirements will increase. We believe that our cash and cash equivalents available at December 31, 2008 and our ability to control certain costs, including those related to general and administrative expenses, will enable us to meet our anticipated cash expenditures through January 1, 2010. Beyond January 1, 2010, we may need to raise additional capital through a debt financing or equity offering to meet our operating and capital needs. There can be no assurance, however, that we will be successful in our fundraising efforts or that additional funds will be available on acceptable terms, if at all.

In 2008, we raised \$707,000 through the exercise of various warrants. If we are unable to raise additional capital in 2010 we may need to terminate certain of our employees and adjust our current business plan. Financial considerations may cause us to modify planned deployment of new energy systems and we may decide to suspend installations until we are able to secure additional working capital. We will evaluate possible acquisitions of, or investments in, businesses, technologies and products that are complementary to our business; however, we are not currently engaged in such discussions.

The company's operations are comprised of one business segment. Our business is selling energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements. The preparation of financial statements in conformity with generally accepted accounting principles, or GAAP, 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.

**Note 2 — Summary of significant accounting policies:**

*Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of the company, its wholly owned subsidiary American DG Energy and its 51% joint venture, American DG New York, LLC, or ADGNY, (referred to hereafter as "Investee entities"), after elimination of all material intercompany accounts, transactions and profits. Investee entities in which the company owns directly or indirectly 50% or more of the membership interests have been consolidated as a result of the company's control over the Investee entities. Minority interests in the net assets and earnings or losses of consolidated Investee entities are reflected in the caption "Minority interest" in the accompanying consolidated financial statements. Minority interest adjusts the consolidated results of operations to reflect only the company's shares of the earnings or losses of the consolidated investee entities. Upon dilution of ownership below 50%, the accounting method is adjusted to the equity or cost method of accounting, as appropriate, for subsequent periods.

The company evaluates the applicability of Financial Accounting Standards Board, or FASB, Interpretation No. 46 (Revised) "Consolidation of Variable Interest Entities", or FIN No. 46(R), to partnerships and joint ventures at the inception of its participation to ensure its accounting is in accordance with the appropriate standards. The company has contractual interests in Tecogen and determined that Tecogen was a Variable Interest Entity, as defined by FIN No. 46(R); however, the company was not considered the primary beneficiary and does not have any exposure to loss as a result of its involvement with Tecogen. Therefore, Tecogen was not consolidated in our consolidated financial statements through December 31, 2008. See Note 7 - Related Party for further discussion.

*Use of Estimates*

The preparation of financial statements in conformity with GAAP 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.

*Revenue Recognition*

Revenue from energy contracts is recognized when electricity, heat, and chilled water is produced by the cogeneration systems onsite. The company bills each month based on various meter readings installed at each site. The amount of energy produced by on-site energy systems is invoiced, as determined by a contractually defined formula. Under certain energy contracts, the customer directly acquires the fuel to power the systems and receives credit for that expense from the company. The credit is recorded as revenue and cost of fuel. We recognize revenue that relates to multiple element contracts in accordance with Emerging Issues Task Force 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables". Revenue to which this guidance applies includes a contract that consists of the sale of equipment, installation, energy and maintenance. When a sales arrangement contains multiple elements, revenue is allocated to each element based upon its relative fair value. Fair value is determined based on the price of a deliverable sold on a standalone basis.

As a by-product of our energy business, in some cases the customer may choose to have us construct the system for them rather than have it owned by American DG Energy. In this case, we account for 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, regardless of the percentage of completion. In certain instances, revenue from unresolved claims is recorded when, in the opinion of management, realization of such revenue is probable and can be reliably estimated, only to the extent of actual costs incurred. Otherwise, revenue from claims is recorded in the year in which such claims are resolved. Costs and estimated earnings in excess of related billings and unbilled revenue represent the excess of contract costs and profit recognized to date on the percentage-of-completion accounting method over billings to

date on certain contracts. Billings in excess of related costs and estimated earnings represents the excess of billings to date over the amount of contract costs and profits recognized to date on the percentage-of-completion accounting method for certain contracts. Customers may buy out their long-term obligation under energy contracts and purchase the underlying equipment from the company. Any resulting gain on these transactions is recognized in the consolidated statements of operations. Revenues from operation and maintenance services, including shared savings are recorded when provided and verified.

#### *Cash and Cash Equivalents*

The company considers all highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. The company has cash balances in certain financial institutions in amounts which occasionally exceed current federal deposit insurance limits. The financial stability of these institutions is continually reviewed by senior management. The company believes it is not exposed to any significant credit risk on 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 are recorded at fair value.

#### *Accounts Receivable*

The company maintains receivable balances primarily with customers located throughout New York and New Jersey. The company reviews its customers' credit history before extending credit and generally does not require collateral. An allowance for doubtful accounts is established based upon factors surrounding the credit risk of specific customers, historical trends and other information. Generally, such losses have been within management's expectations.

Accounts receivable are presented net of an allowance for doubtful collections of \$51,759 and \$35,589 at December 31, 2008 and December 31, 2007, respectively. Included in accounts receivable are amounts from four major customers accounting for approximately 45% and 59% of total accounts receivable for the years ended December 31, 2008 and December 31, 2007, respectively. There were sales to three customers accounting for approximately 27% and 41% of total sales for the years ended December 31, 2008 and December 31, 2007, respectively.

#### *Accounts Payable*

Included in accounts payable are amounts due to five major vendors accounting for approximately 51% and 58% of total accounts payable for the years ended December 31, 2008 and December 31, 2007, respectively. Purchases from four vendors accounted for approximately 50% and 47% of total cost of goods sold for the years ended December 31, 2008, and December 31, 2007, respectively.

#### *Supply Concentrations*

Approximately 100% of the company's cogeneration unit purchases for the years ended December 31, 2008 and 2007 were from one vendor (see "Note 7 - Related Party"). We believe there are sufficient alternative vendors available to ensure a constant supply of cogeneration units on comparable terms. However, in the event of a change in suppliers, there could be a delay in obtaining units which could result in a temporary slowdown of installing additional income producing sites. In addition, the majority of the company's units are installed and maintained by the minority interest holder or maintained by Tecogen. The company believes there are sufficient alternative vendors available to ensure a constant supply of installation services on comparable terms. However, in the event of a change of vendor, there could be a delay in installation or maintenance services.

#### *Property and Equipment and Depreciation and Amortization*

Property and equipment are stated at cost. Depreciation and amortization are computed using the straight-line method at rates sufficient to write off the cost of the applicable assets over their estimated useful lives. The company uses 10 years for the majority of the assets such as its energy systems and 3-5 years for computer equipment, software, office furniture, etc. Repairs and maintenance are expensed as incurred.

*Stock Based Compensation*

Effective January 1, 2006, we adopted Statement of Financial Accounting Standards No. 123 (revised 2004), "Share Based Payment", or SFAS No. 123(R), which is a revision of Statement of Financial Accounting Standards No. 123, "Accounting for Stock Based Compensation", or SFAS No. 123. SFAS No. 123(R) supersedes Accounting Principles Board No. 25, "Accounting for Stock Issued to Employees", or APB No. 25, and Statement of Financial Accounting Standards No. 95 "Statement of Cash Flows", or SFAS No. 95. SFAS No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure is no longer an alternative.

SFAS No. 123(R) requires nonpublic companies that used the minimum value method in SFAS No. 123 for either recognition or pro forma disclosures to apply SFAS No. 123(R) using the prospective-transition method. As such, since we were not a public company as of the adoption date, we will continue to apply APB No. 25 in future periods to equity awards outstanding at the date of SFAS No. 123(R)'s adoption that were measured using the minimum value method.

The company recognized employee non-cash stock based compensation expense of \$364,231 and \$330,335 related to the issuance of restricted stock and stock options at December 31, 2008 and December 31, 2007, respectively. The total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is \$726,453 at December 31, 2008. This amount will be recognized over the weighted average period of six years.

The determination of the fair value of share-based payment awards is affected by the company's stock price. Since inception and until November 7, 2007, since the company was not publicly traded, the company considered the sales price of common stock in private placements to unrelated third parties as a measure of the fair value of its common stock. The company started trading on November 8, 2007, therefore since such date, it has used the market price of its common stock to determine fair value of share-based payment awards.

SFAS 123(R) also requires companies to utilize an estimated forfeiture rate when calculating the expense for the period, whereas, SFAS 123 permitted companies to record forfeitures based on actual forfeitures, which was our historical policy under SFAS 123. 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 in our financial statements in 2008 and thereafter is based on awards that are ultimately expected to vest. We evaluate the assumptions used to value our awards on a quarterly basis and if factors change and we employ different assumptions, stock-based compensation expense may differ significantly from what we have recorded in the past. If there are any modifications or cancellations of the underlying unvested securities, we may be required to accelerate, increase or cancel any remaining unearned stock-based compensation expense.

On November 10, 2005, the FASB issued Statement of Financial Accounting Standards Staff Position No. 123R-3 "Transition Election Related to Accounting for Tax Effects of Share-Based Payment Awards", or SFAS No. 123R-3. The company has elected to adopt the alternative transition method provided the FASB Staff Position for calculating the tax effects (if any) of stock-based compensation expense pursuant to SFAS No. 123(R). The alternative transition method includes simplified methods to establish the beginning balance of the additional paid-in capital pool related to the tax effects of employee stock-based compensation, and to determine the subsequent impact to the additional paid-in capital pool and the consolidated statements of operations and cash flows of the tax effects of employee stock-based compensation awards that are outstanding upon adoption of SFAS No. 123(R).

See "Note 5 – Stockholders' Equity" for a summary of the restricted stock and stock option activity under our stock-based employee compensation plan for the years ended December 31, 2008 and December 31, 2007.

*Loss per Common Share*

We compute basic loss per share by dividing net income (loss) for the period by the weighted average number of shares of common stock outstanding during the period. We compute our diluted earnings per common share using the treasury stock method. For purposes of calculating diluted earnings per share, we consider our shares issuable in connection with convertible debentures, stock options and warrants to be dilutive common stock equivalents when the exercise price is less than the average market price of our common stock for the period. For the year ended December 31, 2008, we excluded 10,543,049 anti-dilutive shares resulting from conversion of debentures and exercise of stock options, warrants and unvested restricted stock, and for the year ended December 31, 2007, we excluded 12,352,496 anti-dilutive shares resulting from conversion of debentures and exercise of stock options, warrants and unvested restricted stock. All shares issuable for both years were anti-dilutive because of the reported net loss.

*Other Comprehensive Net Loss*

The comprehensive net loss for the years ended December 31, 2008 and 2007 does not differ from the reported loss.

*Impairment of Intangible Assets*

The company evaluates the recoverability of its long-lived assets in accordance with Statement of Financial Accounting Standards No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets", or SFAS No. 144. SFAS No. 144 requires the recognition of impairment of long-lived assets in the event the net book value of such assets exceeds the estimated future undiscounted cash flows attributable to such assets. If impairment is indicated, the asset is written down to its estimated fair value based on a discounted cash flow analysis. The company reviews long-lived assets for impairment annually or whenever events or changes in business circumstances indicate that the carrying value of the assets may not be fully recoverable or that the useful lives of the assets are no longer appropriate. At December 31, 2008 the company determined that its long-lived assets are recoverable.

*Income Taxes*

Income taxes are recorded in accordance Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes", or SFAS No. 109. Under SFAS No. 109, deferred tax assets and liabilities are determined based on differences between the financial reporting and tax reporting bases of assets and liabilities and are measured by applying the enacted tax rates and laws to taxable years in which the differences are expected to reverse. We recognize a deferred tax asset for the tax benefit of net operating loss carry forwards when it is more likely than not that the tax benefits will be realized and reduce the deferred tax asset with a valuation reserve when it is more likely than not that some portion of the tax benefits will not be realized.

*Fair Value of Financial Instruments*

The company's financial instruments are cash and cash equivalents, short-term investments, accounts receivable, accounts payable, convertible debentures and notes due from related parties. The recorded values of cash and cash equivalents, accounts receivable, accounts payable and notes due from related parties approximate their fair values based on their short-term nature. Short-term investments are recorded at fair value. The carrying value of the convertible debentures on the balance sheet at December 31, 2008 approximates fair value as the term approximate those currently available for similar instruments. See Note 8 for discussion of fair value measurements.

*Recent Accounting Pronouncements*

In December 2007, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards No. 141(R) "Business Combinations", or SFAS No. 141(R), which requires changes in the accounting and reporting of business acquisitions. The statement requires an acquirer to recognize the assets acquired, the liabilities assumed, and any noncontrolling interest in purchased entities, measured at their fair values at the date of acquisition based upon the definition of fair value outlined in Statement of Financial Accounting Standards No. 157, or SFAS No. 157. SFAS No. 141(R) is effective for the company for acquisitions that occur beginning in 2009. The effects of SFAS No. 141(R) on our financial statements will depend on the extent that the company makes business acquisitions in the future.

In December 2007, the FASB issued Statement of Financial Accounting Standards No. 160, "Noncontrolling Interests in Consolidated Financial Statements an Amendment of ARB No. 51", or SFAS No. 160, which requires changes in the accounting and reporting of noncontrolling interests in a subsidiary, also known as minority interest. The statement clarifies that a minority interest in a subsidiary is an ownership interest in the consolidated entity that should be reported as equity in the consolidated financial statements. SFAS No. 160 is effective for the company at the beginning of 2009. The company is continuing to review provisions of SFAS No. 160, which is effective the first quarter of fiscal 2009 and expects this new accounting standard to result in changes in the presentation of minority interests in the financial statements consistent with the new standard.

In February 2008, the FASB issued FASB Staff Position No. 157-2, or FSP No. 157-2, which delays the effective date of SFAS No. 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). SFAS No. 157 establishes a framework for measuring fair value and expands disclosures about fair value measurements. FSP No. 157-2 partially defers the effective date of SFAS No. 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of this FSP No. 157-2. The adoption of SFAS No. 157 for all nonfinancial assets and nonfinancial

liabilities is effective for us beginning January 1, 2009. The company does not expect SFAS No. 157 to have a material impact on its results of operations and financial condition.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161, "Disclosures about Derivative Instruments and Hedging Activities — an amendment of Statement of Financial Accounting Standards No. 133", or SFAS No. 161. SFAS No. 161 changes the disclosure requirements for derivative instruments and hedging activities. This standard requires enhanced disclosures about how and why an entity uses derivative instruments, how instruments are accounted for under Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities," and how derivatives and hedging activities affect an entity's financial position, financial performance and cash flows. This standard is effective for fiscal years beginning after November 15, 2008. The company does not expect SFAS No. 161 to have a material impact on its results of operations and financial condition.

In May 2008, FASB issued Statement of Financial Accounting Standards No. 162, "The Hierarchy of Generally Accepted Accounting Principles", or SFAS No. 162. SFAS No. 162 identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements that are presented in conformity with GAAP in the U.S. SFAS No. 162 is effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with Generally Accepted Accounting Principles." The company does not expect SFAS No. 162 to have a material impact on its results of operations and financial condition.

**Note 3 — Property plant and equipment:**

Property and equipment consists of the following as of December 31, 2008 and December 31, 2007:

	December 31,	
	2008	2007
Co-generation units	\$ 7,187,383	\$ 4,128,330
Inventory	355,851	86,138
Computer equipment and software	20,199	18,089
Furniture and fixtures	26,846	906
Vehicles	37,193	-
	<u>7,627,472</u>	<u>4,233,463</u>
Less -- accumulated depreciation	(1,506,511)	(901,986)
	<u>6,120,961</u>	<u>3,331,477</u>
Construction in progress	862,431	1,959,833
	<u>\$ 6,983,392</u>	<u>\$ 5,291,310</u>

Depreciation of property and equipment totaled \$604,525 and \$368,952 for the years ended December 31, 2008 and December 31, 2007.

**Note 4 — Convertible debentures:**

In April and June of 2006, the company issued convertible debentures totaling \$6,075,000 to existing investors (the "debentures"). The debentures accrue interest at a rate of 8% per annum and are due five years from the 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 outstanding amount of the respective debenture by the conversion price in effect at the time. The initial conversion price of the debenture is \$0.84 and is subject to adjustment in accordance with the agreement. As of December 31, 2008 the conversion price of the debenture has not been adjusted.

In 2007, a holder of the company's 8% Convertible Debenture elected to convert \$50,000 of the outstanding principal amount of the debenture into 59,524 shares of common stock. In 2008, two holders of the company's 8% Convertible Debenture elected to convert \$150,000 of the outstanding principal amount of the debentures into 178,572 shares of common stock. At December 31, 2008, there were 6,994,049 shares of common stock issuable upon conversion of our outstanding convertible debentures.

**Note 5 — Stockholders' equity:***Common Stock*

In 2007 the company raised additional funds through a private placement of common stock to a limited number of accredited investors. In connection with the private placement the company sold an aggregate of 5,692,150 shares of common stock at a purchase price of \$0.70 per share, resulting in net cash proceeds of \$3,892,218. In 2008 there were no funds raised through sales of common stock.

The holders of common stock have the right to vote their interest on a per share basis. At December 31, 2008, there were 34,034,496 shares of common stock outstanding.

*Warrants*

From December 1, 2003 to December 31, 2005, the company raised funds through a private placement of shares of common stock to a limited number of accredited investors. In connection with the private placement, the company issued warrants to purchase an aggregate of 3,895,000 shares of common stock at a price of \$0.70. The company issued 1,030,000, 775,000 and 2,090,000 warrants in 2003, 2004 and 2005 respectively. Each warrant represents the right to purchase one share of common stock for a period of three or five years from the date the warrant was issued.

During the year ended December 31, 2007, investors exercised 200,000 warrants with expiration dates in 2007, for gross proceeds to the company of \$140,000 and during the year 575,000 warrants expired. During the year ended December 31, 2008, investors exercised 1,010,000 warrants with expiration dates in 2008, for gross proceeds to the company of \$707,000. Of these warrants, 50,000 were exercised towards the end of the year, therefore, the company established a receivable shown as common stock subscription on the balance sheet and that amount was collected early in 2009. During the year 480,000 warrants expired. As of December 31, 2008 there were 500,000 fully vested exercisable warrants outstanding at \$0.70 per share, which expire in 2010.

On February 24, 2009, the company sold a warrant to purchase shares of the company's common stock to an accredited investor, for a purchase price of \$10,500. The warrant, which expires on February 24, 2012, gives the investor the right but not the obligation to purchase 50,000 shares of the company's common stock at an exercise price per share of \$3.00.

*Stock Based Compensation*

The company has adopted the 2005 Stock Incentive Plan, or 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. On April 17, 2008 the board unanimously amended the Plan, subject to shareholder approval, to increase the reserved shares of common stock issuable under the Plan from 4,000,000 to 5,000,000 (the "Amended Plan"). On May 30, 2008, at the company's annual meeting, the shareholders voted in favor of an amendment to increase the number of shares of common stock of the company available for issuance under the Plan from 4,000,000 to 5,000,000 shares.

The maximum number of shares of stock allowable for issuance under the Amended Plan is 5,000,000 shares of common stock, including 1,229,500 shares of restricted stock outstanding as of December 31, 2008. Stock options vest based upon the terms within the individual option grants, usually over a two- or ten-year period with an acceleration of the unvested portion of such options upon a liquidity event, as defined in the company's stock option agreement. The options are not transferable except by will or domestic relations order. The option price per share under the Amended Plan is not less than the fair market value of the shares on the date of the grant. The number of securities remaining available for future issuance under the Amended Plan was 1,061,500 at December 31, 2008.

We account for stock awards issued to employees in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), "Share Based Payment", or SFAS No. 123(R) and have adopted the prospective application stock based transition method. During the years ended December 31, 2008 and December 31, 2007, the company recognized employee non-cash compensation expense of \$364,231 and \$330,335, respectively, related to the issuance of stock options and restricted stock. At December 31, 2008 there were 720,000 unvested shares of restricted stock outstanding. At December 31, 2008 the total compensation cost related to unvested restricted stock awards and stock option awards not yet recognized is \$726,453. This amount will be recognized over the weighted average period of six years.

In 2007 the company granted nonqualified options to purchase 1,156,000 shares of the common stock to seven employees at \$0.90 per share. Of those stock options 1,130,000 have a vesting schedule of 10 years and 26,000 stock options

have a vesting schedule of four years. In 2008, the company granted to one of its employees nonqualified options to purchase 100,000 shares of the common stock at \$1.95 per share. Those options have a vesting schedule of four years and expire in ten years. The fair value of the options issued in 2008 was \$93,977. Stock option activity for the years ended December 31, 2008 and 2007 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, 2006	1,620,000	\$0.07-\$0.70	\$ 0.26	6.29 years	\$ 705,600
Granted	1,156,000	\$0.90	0.90		
		\$0.07			83,000
Exercised	(100,000)	\$0.70	0.07		
Canceled	(25,000)	\$0.07-\$0.70	0.70		
Expired	(410,000)		0.07		
Outstanding, December 31, 2007	2,241,000	\$0.07-\$0.90	0.63	7.71 years	\$ 607,600
Vested and exercisable, December 31, 2007	1,011,750		\$ 0.34		\$ 570,350
Outstanding, December 31, 2007	2,241,000	\$0.07-\$0.90	\$ 0.63	7.71 years	\$ 607,600
Granted	100,000	\$1.95	1.95		
Exercised	-	-	-		-
		\$0.90			
Canceled	(12,000)		0.90		
Expired	-	-	-		-
Outstanding, December 31, 2008	2,329,000	\$0.07-\$1.95	0.68	6.95 years	\$ 3,017,920
Vested and Exercisable, December 31, 2008	1,244,500		\$ 0.42		\$ 1,937,660

The aggregate intrinsic value of options outstanding as of December 31, 2008 is calculated as the difference between the exercise price of the underlying options and the price of the company's common stock for options that were in-the-money as of that date. Options that were not in-the-money as of that date, and therefore have a negative intrinsic value, have been excluded from this amount.

In 2007, the company made restricted stock grants to employees, board members and consultants by permitting them to purchase an aggregate of 737,000 shares of common stock at a price of \$0.001 per share. Out of those shares, 681,000 have a vesting schedule of 25% on January 2, 2008 and then 25% on each subsequent anniversary thereafter and 56,000 shares which vest based on certain gross profit goals as described in the restricted stock purchase agreement. In 2008, the company made a restricted stock grant to one employee by permitting him to purchase an aggregate of 40,000 shares of common stock, at a price of \$0.001 per share. The fair value of the restricted stock issued in 2008 was \$77,960 and vests in four years.

Restricted stock activity for the years ended December 31, 2008 and 2007 was as follows:

	Number of Restricted Stock	Grant Date Fair Value
Unvested, December 31, 2006	287,500	\$ 0.70
Granted	737,000	0.70
Vested	(60,625)	0.70
Forfeited	(15,000)	0.70
Unvested, December 31, 2007	948,875	0.70
Granted	40,000	1.95
Vested	(268,875)	0.70
Forfeited	-	-
Unvested, December 31, 2008	720,000	\$ 0.77

The company's calculations of stock-based compensation expense for the years ended December 31, 2008 and 2007, respectively, were made using the Black-Scholes option pricing valuation model. The fair value is then amortized on an accelerated basis over the requisite service periods of the awards, which is generally the vesting period. 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 20 companies in the same industry as the company. The average expected life



was estimated using the simplified method for “plain vanilla” options as permitted by SEC Staff Accounting Bulletin No. 107, or SAB No. 107. The expected life in years is based on the “simplified” calculation provided for in SAB No. 107. The simplified method determines the expected life in years based on the vesting period and contractual terms as set forth when the award is made. The company continues to use the simplified method for awards of stock-based compensation after January 1, 2008 as permitted by SEC Staff Accounting Bulletin No. 110, or SAB No. 110, since it does not have the necessary historical exercise and forfeiture data to determine an expected life for stock options. Originally, the use of the simplified method was due to expire on December 31, 2007, but SAB No. 110 permits continued use of the simplified method if the company concludes that it is not reasonable to base its estimate of expected term on its experience with historical exercise patterns. 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. When options are exercised the company normally issues new shares.

The weighted average assumptions used in the Black-Scholes option pricing model are as follows:

	2008	2007
Stock option awards		
Expected life	6.25 years	7.71 years
Risk-free interest rate	1.62%	4.14%
Expected volatility	48.34%	48.26%

**Note 6 — Employee benefit plan:**

The company has a defined contribution retirement plan, or the Retirement Plan which qualifies under Section 401(k) of the Internal Revenue Code, or the IRC. Under the Retirement 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 \$31,717 and \$27,138 to the Retirement Plan for the years ended December 31, 2008 and 2007, respectively.

**Note 7 — Related party:**

The company purchases the majority of its cogeneration units from Tecogen, an affiliate company sharing similar ownership. In addition, Tecogen pays certain operating expenses, including benefits and payroll, on behalf of the company and the company leases office space from Tecogen. These costs were reimbursed by the company. Tecogen has a sublease agreement for the office building, which expires on March 31, 2014.

In January 2006, the company entered into the 2006 Facilities, Support Services and Business Agreement, or the Agreement, with Tecogen, to provide the company with certain office and business support services for a period of one year, renewable annually by mutual agreement. In January and May 2008, we amended the Agreement with Tecogen. Under the amendments, Tecogen provides the company with office space and utilities at a monthly rate of \$2,053 and \$2,780, respectively. Subsequent to year-end, on January 2009, the company assumed additional space and amended the office space and utilities to a monthly rate of \$4,838.

The company has sales representation rights to Tecogen’s products and services. In New England, the company has exclusive sales representation rights to Tecogen’s cogeneration products. The company has granted Tecogen sales representation rights to its On-Site Utility energy service in California.

On February 15, 2007, the company loaned the minority interest partner in ADGNY \$20,000 by signing a two year loan agreement earning interest at 12% per annum. On April 1, 2007, the company loaned an additional \$75,000 to the same minority interest partner by signing a two year note agreement earning interest at 12% per annum, and on May 16, 2007, the company loaned an additional \$55,000 to the same partner by signing a two year note agreement under the same terms. All notes are classified in the Due from related party account in the accompanying balance sheet and are secured by the partner’s minority interest. On October 11, 2007, we extended to our minority interest partner a line of credit of \$500,000. At December 31, 2008, \$265,012 was outstanding and due to the company under the combination of the above agreements.

The company’s Chief Financial Officer devotes part of his business time to the affairs of GlenRose Instruments Inc., or GlenRose, and part of his salary is reimbursed by GlenRose. Also, the company’s Chief Executive Officer is the Chairman of the Board and a significant investor in GlenRose and did not receive a salary, bonus or any other compensation from GlenRose in 2008.

**Note 8 — Fair value measurements:**

SFAS No. 157 defines and establishes a framework for measuring fair value and expands disclosures about fair value measurements. In accordance with SFAS No. 157, we have categorized our 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 of 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.

At December 31, 2008, the company had \$761,614 in short-term investments that are comprised of Certificates of Deposits which are categorized as Level 2. The Company determines the fair value of certificates of deposits using information provided by the issuing bank which includes discounted expected cash flow estimates using current market rates offered for deposits with similar remaining maturities. The unrealized loss during the year was not material.

**Note 9 — Income taxes:**

A reconciliation of federal statutory income tax provision to the company’s actual provision for the years ended December 31, 2008 and December 31, 2007, respectively, are as follows:

	2008	2007
Benefit at federal statutory tax rate	\$ (760,000)	\$ (504,000)
Unbenefited operating losses	760,000	504,000
Tax expense	\$ -	\$ -

The components of net deferred tax assets recognized in the accompanying balance sheets at December 31, 2008 and December 31, 2007, respectively, are as follows:

	2008	2007
Net operating loss carryforwards	\$ 3,149,000	\$ 2,196,000
Accrued expenses and other	178,000	118,000
Depreciation	(271,000)	(12,000)
	3,056,000	2,302,000
Valuation allowance	(3,056,000)	(2,302,000)
Net deferred tax asset	\$ -	\$ -

As of December 2008, the company has federal and state loss carryforwards of approximately \$8,500,000 and \$4,900,000, respectively, which may be used to offset future federal and state taxable income, expiring at various dates through 2028.

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. 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.

## AMERICAN DG ENERGY INC.

The company adopted FASB interpretation No. 48, "Accounting for Uncertainty in Income Taxes- an interpretation of FASB Statement No. 109", effective January 1, 2007. The adoption of this statement had no effect on the company's financial position. The company has no uncertain tax positions as of either the date of the adoption, or as of December 31, 2008. The company has no amounts recorded for interest and penalties in the accompanying December 31, 2008 and December 31, 2007 consolidated statements of operations. The company's tax years 2005 to 2007 remain subject to examination by major tax jurisdictions.

### Note 10 — Commitments and contingencies:

In January 2006, the company entered into the Agreement with Tecogen to provide the company with certain office and business support services for a period of one year, renewable annually by mutual agreement. The company also shares personnel support services with Tecogen. The company is allocated its share of the cost of the personnel support services based upon the amount of time spent by such support personnel while working on the company's behalf. To the extent Tecogen is able to do so under its current plans and policies, Tecogen includes the company and its employees in several of its insurance and benefit programs. The costs of these programs are charged to the company on an actual cost basis. Under this agreement, the company receives pricing based on a volume discount if it purchases cogeneration and chiller products from Tecogen. For certain sites, the company hires Tecogen to service its Tecogen chiller and cogeneration products. In January and May 2008, we amended the Agreement with Tecogen. Under the amendments, Tecogen provides the company with office space and utilities at a monthly rate of \$2,053 and \$2,780, respectively. Subsequent to year-end, in January 2009, the company assumed additional space and amended the office space and utilities to a monthly rate of \$4,838.

The company is the lessee of certain equipment under capital lease expiring in 2013. The following is a schedule of future minimum lease payments, together with the present value of the net minimum lease payments under capital leases as of December 31, 2008.

	Payments
2009	\$ 5,221
2010	5,221
2011	5,221
2012	5,221
2013	5,221
Total lease payments	26,105
Less: Amount representing interest	(9,280)
Present value of minimum lease payments	\$ 16,825

## AMENDMENT NO. 2

**THIS AMENDMENT TO FACILITIES AND SUPPORT SERVICES AGREEMENT** is effective as of May 15, 2008 between Tecogen Inc., a Delaware corporation ("Tecogen"), and American DG Energy Inc., a Delaware corporation ("ADG Energy").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby reaffirm all of the provisions of the Facilities and Support Services Agreement, dated January 1, 2006 (the "Agreement"), except that the following paragraphs shall be substituted for the corresponding paragraphs in the Agreement.

**1. Office and Infrastructure**

Tecogen will provide to ADG Energy the following office and infrastructure support services for a period from the date of this Agreement through the Termination Date (as such term is defined in Section 2 below):

(a) **Office Space.** Approximately 1,872 allocated square feet of space in Tecogen's offices located at 45 First Avenue, Waltham, Massachusetts 02451 (the "Building"), which shall include three (3) offices and a shared conference room. Tecogen will also provide ADG Energy with water, sewer, electrical, phones and other utility services, heating, ventilation and air-conditioning, and cleaning and janitorial services. Tecogen may change the space in the Building occupied by ADG Energy from time to time during the term of this Agreement. Tecogen will provide such space and services at a flat rate of \$2,780.00 per month. If additional space is provided, this flat fee will increase at an annual rate of \$15.93 per square foot for any additional office space and \$12.96 per square foot for any additional manufacturing space. Copy machine usage, office supplies, postage and shipping, secretarial & receptionist services, Internet service, telephone support and IT support are not included in the monthly rate and will be billed separately.

(c) **Insurance and Employee Benefit Plans.** To the extent it is able to do under its then current plans and policies, Tecogen will include ADG Energy as a covered entity under its liability, property and casualty, workers compensation and other applicable business insurance policies. Tecogen will allow ADG Energy employees to participate in Tecogen's medical and dental insurance plans, and other group insurance plans for its employees, including life, AD&D, and short and long-term disability plans. The costs of these insurance programs will be charged to ADG Energy on an actual cost basis when available, or in the case of general insurance be allocated to ADG Energy for its pro rata share of the premiums. Management of the plans will be carried out jointly by both companies and with no charge to each other.

(g) **Exclusivity:** ADG Energy shall be granted exclusive representation rights to the Tecogen Cogeneration Product in the New England States, and Tecogen shall be granted exclusive representation rights to the ADG Energy Cogeneration Product in California. The relevant portions of Tecogen's standard rep agreement shall apply except where in conflict with this agreement. ADG Energy will be eligible for split commissions for cogeneration and chiller products as presented in Tecogen's standard rep agreement.

**2. Term**

The term of the Agreement, as amended hereby, commenced as of the effective date for one year, renewable annually upon mutual written agreement.

IN WITNESS WHEREOF, the parties hereto have caused this amendment to be duly executed and delivered by their proper and duly authorized representatives as of the day and year first above written.

Dated: May 15, 2008 (but effective as set forth above).

TECOGEN INC.

AMERICAN DG ENERGY INC.

By: /s/ Robert A. Panora  
Title: President

By: /s/ Barry J. Sanders  
Title: President

## AMENDMENT NO. 3

**THIS AMENDMENT TO FACILITIES AND SUPPORT SERVICES AGREEMENT** is effective as of January 1, 2009 between Tecogen Inc., a Delaware corporation ("Tecogen"), and American DG Energy Inc., a Delaware corporation ("ADG Energy").

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby reaffirm all of the provisions of the Facilities and Support Services Agreement, dated January 1, 2006 (the "Agreement"), except that the following paragraphs shall be substituted for the corresponding paragraphs in the Agreement.

**1. Office and Infrastructure**

Tecogen will provide to ADG Energy the following office and infrastructure support services for a period from the date of this Agreement through the Termination Date (as such term is defined in Section 2 below):

(a) **Office Space.** Approximately 2,702 allocated square feet of space in Tecogen's offices located at 45 First Avenue, Waltham, Massachusetts 02451 (the "Building"), which shall include six (6) offices, a shared conference room and manufacturing space. Tecogen will also provide ADG Energy with water, sewer, electrical, phones and other utility services, heating, ventilation and air-conditioning, and cleaning and janitorial services. Tecogen may change the space in the Building occupied by ADG Energy from time to time during the term of this Agreement. Tecogen will provide such space and services at a flat rate of \$4,838.00 per month. If additional space is provided, this flat fee will increase at an annual rate of \$17.72 per square foot for any additional office space and \$16.68 per square foot for any additional manufacturing space. Copy machine usage, office supplies, and shipping, secretarial & receptionist services, Internet service, telephone support and IT support are not included in the monthly rate and will be billed separately.

(c) **Insurance and Employee Benefit Plans.** To the extent it is able to do under its then current plans and policies, Tecogen will include ADG Energy as a covered entity under its liability, property and casualty, workers compensation and other applicable business insurance policies. Tecogen will allow ADG Energy employees to participate in Tecogen's medical and dental insurance plans, and other group insurance plans for its employees, including life, AD&D, and short and long-term disability plans. The costs of these insurance programs will be charged to ADG Energy on an actual cost basis when available, or in the case of general insurance be allocated to ADG Energy for its pro rata share of the premiums. Management of the plans will be carried out jointly by both companies and with no charge to each other.

(g) **Exclusivity:** ADG Energy shall be granted exclusive representation rights to the Tecogen Cogeneration Product in the New England States, and Tecogen shall be granted exclusive representation rights to the ADG Energy Cogeneration Product in California. The relevant portions of Tecogen's standard rep agreement shall apply except where in conflict with this agreement. ADG Energy will be eligible for split commissions for cogeneration and chiller products as presented in Tecogen's standard rep agreement.

**2. Term**

The term of the Agreement, as amended hereby, commenced as of the effective date for one year, renewable annually upon mutual written agreement.

IN WITNESS WHEREOF, the parties hereto have caused this amendment to be duly executed and delivered by their proper and duly authorized representatives as of the day and year first above written.

Dated: January 2, 2009 (but effective as set forth above).

TECOGEN INC.

AMERICAN DG ENERGY INC.

By: /s/ Robert A. Panora

By: /s/ Barry J. Sanders

Title: President

Title: President

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

As independent registered public accountants, we hereby consent to the incorporation of our report dated March 20, 2009 relating to the consolidated financial statements of American DG Energy Inc. and its subsidiaries as of and for the years ended December 31, 2008 and December 31, 2007 included in this Annual report on Form 10-K, into the Company's previously filed Registration Statements on Form S-8 (File No 333-146628 and File No. 333-151287).

/s/ Vitale, Caturano & Company, P.C.

March 20, 2009  
Boston, Massachusetts

## CERTIFICATION

I, John N. Hatsopoulos, certify that:

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

Date: March 20, 2009

/s/ John N. Hatsopoulos  
Chief Executive Officer

## CERTIFICATION

I, Anthony S. Loumidis, certify that:

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

Date: March 20, 2009

/s/ Anthony S. Loumidis  
Chief Financial Officer



**CERTIFICATION**

We, John N. Hatsopoulos, Chief Executive Officer, and Anthony S. Loumidis, Chief Financial Officer, of American DG Energy Inc. (the "Company"), certify, pursuant to Section 1350, Chapter 63 of Title 18, United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Annual Report on Form 10-K of the Company for the year ended December 31, 2008 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 20, 2009

/s/ John N. Hatsopoulos  
Chief Executive Officer

/s/ Anthony S. Loumidis  
Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

A signed original of this written statement required by 18 U.S.C. § 1350 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

## **CORPORATE INFORMATION**

### ***Officers***

George N. Hatsopoulos  
Chairman of the Board

John N. Hatsopoulos  
Chief Executive Officer

Barry J. Sanders  
President & Chief Operating Officer

Anthony S. Loumidis  
Chief Financial Officer and Treasurer

### ***Directors***

George N. Hatsopoulos  
Founder and Chairman of American DG Energy Inc.

John N. Hatsopoulos  
Founder and Chief Executive Officer of American DG Energy Inc.

Earl R. Lewis  
Chairman, Chief Executive Officer and President of FLIR Systems Inc.

Charles T. Maxwell  
Senior Energy Analyst of Weeden & Co.

Alan D. Weinstein  
Former President of Premier Inc.

### ***Corporate Address***

American DG Energy Inc.  
45 First Avenue  
Waltham, Massachusetts 02451

### ***Independent Auditors***

Vitale, Caturano & Co., Ltd.  
80 City Square  
Boston, Massachusetts 02129

### ***Counsel***

Sullivan & Worcester LLP  
One Post Office Square  
Boston, Massachusetts 02109

### ***Transfer Agent***

Continental Stock Transfer & Trust Company  
17 Battery Pl. - 8th Floor  
New York, NY 10004

### ***Stock Market Information***

American DG Energy Inc.'s common stock trades on the Over-the-Counter Bulletin Board under the symbol "ADGE".

### ***Annual Meeting***

The Annual Meeting of Stockholders will be held at 1:00 p.m., local time, on Friday, May 29, 2009, at our offices in Waltham, Massachusetts.

### ***Annual Report/Form 10-K***

The Company's Annual Report and Form 10-K (without exhibits) is available free of charge by writing to the Company at either address set forth above. You can also obtain a copy of the filing by going to the following website: <http://www.sec.gov>.

### ***Website***

<http://www.americandgenenergy.com>

American DG Energy Inc.  
45 First Avenue  
Waltham, Massachusetts 02451  
(781) 522-6000

[www.americandgenergy.com](http://www.americandgenergy.com)  
(OTC BB: ADGE.OB)