

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1
TO
FORM S-8
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

TECOGEN INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

04-3536131

(I.R.S. Employer
Identification Number)

45 First Avenue, Waltham, MA 02451

(Address of Principal Executive Offices and Zip Code)

American DG Energy Inc. 2005 Stock Incentive Plan

Tecogen Inc. 2006 Stock Incentive Plan

(Full title of the plans)

John K. Whiting, IV, Esq.
General Counsel
Tecogen Inc.
45 First Avenue
Waltham, MA 02451

Telephone: (781) 466-6400

(Name, address and telephone number, including area code, of agent for service)

With a copy to:

Neil R.E. Carr

Somertons, PLLC

1025 Connecticut Avenue, N.W., Suite 1000

Washington, D.C. 20036

Telephone: (202) 459-4651

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer

Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

As permitted by Rule 429 under the Securities Act of 1933, as amended (“*Securities Act*”), Tecogen Inc. (“*Company*,” “*we*,” “*our*,” “*us*”) is filing this Post-Effective No.1 to the Form S-8 Registration Statement (“*Post-Effective Amendment No. 1*”) to post-effectively amend (a) the Company’s Form S-8 Registration Statement (Registration No. 333-187928) filed with the Securities and Exchange Commission (“*SEC*”) on April 15, 2013, and (b) the Company’s Form S-8 Registration Statement (Registration No. 333-218244) filed with the SEC on May 25, 2017, to include in such Registration Statements a combined “Reoffer Prospectus” relating to shares registered pursuant to such Registration Statements.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 is being filed to amend (a) the Company’s Registration Statement on Form S-8 (File No. 333-187928) filed with the SEC on April 15, 2013, and (b) the Company’s Form S-8 Registration Statement (Registration No. 333-218244) filed with the SEC on May 25, 2017, (*collectively*, “*Registration Statements*”) to include in Part I of the Registration Statements as amended hereby a “*Reoffer Prospectus*” prepared in accordance with the requirements of Part I of Form S-3 under the Securities Act. Pursuant to Instruction C of the Form S-8, the Reoffer Prospectus may, in the future, be used for reoffers and resales, on a continuous or delayed basis, of shares of our common stock that are deemed “control securities” under the Securities Act and which have been or will be acquired pursuant to grants or awards under either the American DG Energy Inc. 2005 Stock Incentive Plan (“*2005 Plan*”) or our 2006 Stock Incentive Plan, as amended (“*2006 Plan*,” *collectively*, “*Plans*”), by the selling shareholders named in the Reoffer Prospectus as supplemented and who are, or may be deemed to be, “affiliates” within the meaning set forth in Rule 405 under the Securities Act. Such selling shareholders may reoffer or resell all, a portion, or none of the shares that they may acquire pursuant to the Plans. Pursuant to Rule 424(b) under the Securities Act, we may supplement the Reoffer Prospectus from time to time with the names of additional selling shareholders and/or amounts of shares of common stock, if any, to be reoffered or resold by such selling shareholders as that information becomes known.



TECOGEN INC.

Common Stock

REOFFER PROSPECTUS

Up to 1,969,169 shares of common stock

This reoffer prospectus relates to up to 1,969,169 shares of Tecogen Inc.'s ("Tecogen," "Company," "we," "our," or "us") common stock that may be reoffered or resold from time to time by certain selling shareholders as described under the caption "Selling Shareholders." The selling shareholders consist of our current or former employees, directors, officers, and consultants who acquired, or will acquire, the shares of our common stock upon the vesting and exercise of incentive or non-qualified stock options, or upon the grant, vesting and/or exercise of certain awards of our common stock issued pursuant to either the American DG Energy Inc. 2005 Stock Incentive Plan ("2005 Plan") or our 2006 Stock Incentive Plan, as amended ("2006 Plan"). The selling shareholders are, or may be deemed to be, our "affiliates" and the shares to be reoffered or resold by the selling shareholders are "control securities" under the Securities Act of 1933, as amended ("Securities Act").

We may supplement this prospectus from time to time with the names of additional selling shareholders and/or amounts of shares to be offered for sale by the selling shareholders.

This prospectus has been prepared for the purposes allowing for future sales by selling shareholders of the shares on a continuous or delayed basis to the public. Currently, selling shareholders who are our "affiliates" may not sell an amount of shares which exceeds in any three-month period the amount specified in Rule 144(e) under the Securities Act. Each selling shareholder that sells shares pursuant to this prospectus and any broker or dealer through whom the shares may be resold may be deemed an "underwriter" within the meaning set forth in the Securities Act. In addition, any commissions received by a broker or dealer in connection with resales of the shares may be deemed to be underwriting commissions or discounts under the Securities Act.

The common stock offered by this prospectus may be reoffered or resold from time to time in transactions on the OTC Markets LLC's OTCQX, or any other market or exchange on which the shares are quoted or listed, in negotiated transactions, at fixed prices which may be changed, at market prices at the time of sale, at prices related to market prices or negotiated prices, or by a combination of these methods.

All of the proceeds of the resale of the shares offered hereby will be received by the selling shareholders. However, if options are exercised in order to purchase shares of our common stock covered by this prospectus, we will receive proceeds from payment of the option exercise price which we expect to use for general working capital purposes. The selling shareholders will bear all sales commissions and similar expense. All costs associated with the registration of the shares under the Securities Act will be borne by us.

Our common stock is currently quoted on the OTC Markets LLC's OTCQX under the symbol "TGEN." On July 24, 2020, the closing bid price of our common stock was \$0.80.

Investing in our securities involves a high degree of risk. See "Risk Factors" contained herein for more information on these risks.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus or any accompanying prospectus supplement. Any representation to the contrary is a criminal offense.

The date of this prospectus is July 28, 2020.

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You should rely only on information contained, or incorporated by reference, in this prospectus. We have not authorized anyone to provide you with information different from that contained, or incorporated by reference, in this prospectus. The selling shareholders may offer to sell, and seek offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

ABOUT THIS REOFFER PROSPECTUS

We have filed with the Securities and Exchange Commission (“SEC”) registration statements on Form S-8 under the Securities Act (“*Registration Statements*”) as amended by Post-Effective Amendment No. 1 to the Registration Statements (“*Post-Effective Amendment No. 1*”) with respect to the shares of common stock registered for reoffer and resale hereby. It is important that you read and consider all of the information contained in or incorporated by reference into this reoffer prospectus and any applicable reoffer prospectus supplement before making any decision to invest in our common stock. This reoffer prospectus incorporates by reference important business and financial information about us that is not included in or delivered with this document. You should also read and consider the additional information contained in the documents that we have incorporated by reference into this reoffer prospectus, as described in “*Where You Can Find More Information*” and “*Incorporation of Documents by Reference*.”

We may add, update or change any of the information contained in this reoffer prospectus or in any accompanying reoffer prospectus supplement we may authorize to be delivered to you. You should not assume that the information contained in this reoffer prospectus or any applicable prospectus supplement is accurate on any date subsequent to the date of this prospectus or that any information we have incorporated herein by reference is correct on any date subsequent to the date of the document incorporated by reference (as our business, financial condition, results of operations and prospects may have changed since that date), even though this prospectus or any applicable prospectus supplement is delivered or securities are sold on a later date.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any accompanying prospectus supplement that we may authorize to be provided to you. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement that we may authorize to be provided to you. This prospectus and any prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus or the prospectus supplement, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

As permitted by the rules and regulations of the SEC, the Registration Statements, as amended, of which this prospectus forms a part, include additional information not contained in this prospectus. You may read the Registration Statements and the other reports we file with the SEC at the SEC’s web site or at the SEC’s offices described below under the heading “*Where You Can Find Additional Information*.”

In this prospectus, unless the context otherwise requires, references to “*Tecogen*,” “*Company*,” “*we*,” “*our*,” or “*us*,” refer to Tecogen Inc. and its subsidiaries. Our logo, trademarks and service marks are the property of Tecogen. Other trademarks or service marks appearing in this prospectus are the property of their respective holders.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC the Registration Statements as amended by Post-Effective Amendment No. 1 with respect to the securities offered hereby. This prospectus, which is a part of the Registration Statements, as amended, does not contain all the information included in the Registration Statements, as amended, and the exhibits and schedules thereto. The Registration Statements, as amended, including the exhibits thereto, contain additional

relevant information about us. The rules and regulations of the SEC allow us to omit some information included in the Registration Statements, as amended, from this prospectus. For further information with respect to us and the securities offered hereby, reference is made to the Registration Statements, as amended, and the exhibits and schedules filed therewith.

You may read and copy the Registration Statements, as amended, as well as our reports, proxy statements, and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. The SEC's Internet site can be found at <http://www.sec.gov>. You can also obtain copies of materials we file with the SEC from our website found at www.tecogen.com. Information on our website does not constitute a part of, nor is it incorporated in any way, into this prospectus and should not be relied upon in connection with making an investment decision.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC permits us to "incorporate by reference" into this reoffer prospectus information we file with the SEC in other documents. This means we can disclose important information to you by referring you to other documents that contain that information. The information we incorporate by reference is considered to be part of this prospectus. Information contained in this prospectus and information we file with the SEC in the future and that we incorporate by reference in this prospectus automatically updates and supersedes previously filed information. We incorporate by reference the documents listed below and any future filings we make after the date of the initial filing of Post-Effective Amendment No. 1 to the Registration Statements of which this prospectus is a part with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended ("*Securities Exchange Act*"), until the offering of the securities covered by this prospectus is completed or terminated:

- Our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 12, 2020
- Our Current Report on Form 8-K filed with the SEC on March 18, 2020
- Our Current Report on Form 8-K filed with the SEC on April 14, 2020
- Our Current Report on Form 8-K filed with the SEC on April 17, 2020
- Our Proxy Statement filed with the SEC on April 21, 2020
- Our Current Report on Form 8-K filed with the SEC on May 12, 2020
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on May 14, 2020
- Our Current Report on Form 8-K filed with the SEC on May 15, 2020
- Our Current Report on Form 8-K filed with the SEC on May 29, 2020
- Our Current Report on Form 8-K filed with the SEC on June 5, 2020
- Our Current Report on Form 8-K filed with the SEC on July 8, 2020
- Our Current Report on Form 8-K filed with the SEC on July 21, 2020
- Description of our securities incorporated by reference from Exhibit 4.4 to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 12, 2020

A statement contained in a document incorporated by reference into this prospectus shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, any prospectus supplement or in any other subsequently filed document which is also incorporated in this prospectus

modifies or replaces such statement. Any statements so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of these documents, which will be provided to you at no cost, by writing to or telephoning: General Counsel, Tecogen Inc., 45 First Avenue, Waltham, Massachusetts 02451, telephone: (781) 466-6400.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This reoffer prospectus and the documents incorporated herein by reference contain forward-looking statements within the meaning of Section 27A of the Securities Act, Section 21E of the Securities Exchange Act, and the Private Securities Litigation Reform Act of 1995 and other federal securities laws that involve a number of risks and uncertainties. Forward-looking statements generally can be identified by the use of forward-looking terminology such as “believes,” “expects,” “may,” “will,” “intends,” “plans,” “should,” “seeks,” “pro forma,” “anticipates,” “estimates,” “continues,” or other variations thereof (including their use in the negative), or by discussions of strategies, plans or intentions. All statements, other than statements of historical fact, included in this prospectus regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects and plans and objectives of management are forward-looking statements.

In addition, such forward-looking statements are necessarily dependent upon assumptions and estimates that may prove to be incorrect. Although we believe that the assumptions and estimates reflected in such forward-looking statements are reasonable, we cannot guarantee that our plans, intentions or expectations will be achieved. The information contained in this prospectus, including the section discussing risk factors, identifies important factors that could cause such differences.

The cautionary statements made in this reoffer prospectus are intended to be applicable to all related forward-looking statements wherever they appear in this reoffer prospectus. We assume no obligations to update such forward-looking statements or to update the reasons why actual results could differ materially from those anticipated in such forward-looking statements.

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere or incorporated by reference into this reoffer prospectus. It may not contain all the information that may be important to you. You should read this entire prospectus, including all documents incorporated herein by reference carefully, especially the “Risk Factors” contained in this prospectus or any supplement hereto and under similar headings in the other documents that are incorporated by reference into this prospectus, and our financial statements and related notes incorporated by reference into this prospectus before making an investment decision with respect to our securities. Please see the sections titled “Where You Can Find Additional Information” and “Incorporation of Documents by Reference” in this prospectus.

Overview of Tecogen

The Company

Tecogen designs, manufactures, markets, and maintains high efficiency, ultra-clean cogeneration products including natural gas engine driven combined heat and power, air conditioning systems, and water heaters for residential, commercial, recreational and industrial use. We provide cost efficient, environmentally friendly and reliable products for distributed power generation that, through patented technology, nearly eliminate criteria pollutants and significantly reduce a customer’s carbon footprint. Tecogen products are expected to run on Renewable Natural Gas (RNG) as it is introduced into the US gas pipeline infrastructure.

Tecogen’s cogeneration systems (also known as combined heat and power or “CHP”) are efficient because they drive electric generators or compressors, which reduce the amount of electricity purchased from the utility

while recovering the engine's waste heat for water heating, space heating, and/or air conditioning at the customer's building.

Tecogen manufactures four types of CHP products:

- Cogeneration units that supply electricity and hot water;
- Chillers that provide air-conditioning and hot water;
- Refrigeration compressors with natural gas engine drives; and
- High-efficiency water heaters.

Our commercial product lines include:

- the InVerde e+[®] and TecoPower cogeneration units;
- TECOCHILL[®] air-conditioning and refrigeration chillers;
- Tecofrost[®] gas engine-driven refrigeration compressors;
- Ilios[®] high-efficiency water heaters; and
- Ultera[®] emissions control technology.

The Company's operations are comprised of two business segments. Our Products and Services segment designs, manufactures and sells industrial and commercial cogeneration systems as described above, and represented 90.6% and 82.2% of our consolidated revenues for the years ended December 31, 2019 and 2018, respectively. Our Energy Production segment sells energy in the form of electricity, heat, hot water and cooling to our customers under long-term sales agreements and represented 9.4% and 17.8% of our consolidated revenues for the years ended December 31, 2019 and 2018, respectively.

The Energy Production business is conducted by our subsidiary American DG Energy Inc. ("ADGE") which sells energy in the form of electricity, heat, hot water and cooling to customers under long-term energy sales agreements (typically with terms of 10 to 15 years). The typical sales model is to install and own energy systems in customers' buildings and sell the energy produced by those systems back to the customers at a cost set by a negotiated formula in customer contracts. We call this our "On-Site Utility" business, or our Energy Production segment. As of December 31, 2019 ADGE owned 40 operational energy systems, representing an aggregate of approximately 3,285 kilowatts of electrical capacity from cogeneration units and 3,410 cooling ton capacity from chillers. The capacity of both system categories has been reduced from 2018 because of the sale of approximately 30% of the ADGE fleet in late 2018 and early 2019.

Traditional customers for our cogeneration and chiller systems include hospitals and nursing homes, schools and universities, health clubs and spas, hotels and motels, office and retail buildings, food and beverage processors, multi-unit residential buildings, laundries, ice rinks, swimming pools, factories, municipal buildings, indoor agriculture, military installations, and indoor growing facilities. Our refrigeration compressors are applied primarily to industrial applications that include cold storage, wineries, dairies, ice rinks and food processing. Market drivers include the price of natural gas, local electricity rates, environmental regulations, and governmental energy policies, as well as customers' desire to become more environmentally responsible.

Through our factory service centers in California, Connecticut, Florida, Massachusetts, Michigan, New Jersey, New York, and Toronto, Canada, our specialized technical staff maintains our products via long-term service contracts. To date the Company has shipped over 3,000 units, some of which have been operating for almost 35 years.

Our Products

All of our products are standardized, modular, CHP products that reduce energy costs, carbon emissions, and dependence on the electric grid. Tecogen's products allow customers to produce power on-site in parallel with

the electric grid or stand alone when no utility grid is available via inverter-based black-start capability. Because our CHP systems also produce clean, usable heat energy, they provide economic advantages to customers who can benefit from the use of hot water, chilled water, air conditioning and heating.

Tecogen products are designed as compact modular units that are intended to be installed in multiples when utilized in larger CHP plants. The majority of our CHP modules are installed in multi-unit sites with applications ranging up to 12 units. This approach has significant advantages over utilizing single larger units, allowing building placement in constrained urban settings and redundancy to mitigate service outages. Redundancy is particularly relevant in regions where the electric utility has formulated tariff structures that include high "peak demand" charges. Such tariffs are common in many areas of the country. Because these tariffs are assessed based on customers' peak monthly demand charge over a very short interval, typically only 15 minutes, a brief service outage for a system comprised of a single unit can create a high demand charge, and therefore be highly detrimental to the monthly savings of the system. Multiple unit sites reduce the likelihood of a full system outage that would result in high demand charges.

Our CHP technology uses low-cost, mass-produced engines, which we modify to run on natural gas. In the case of our mainstay cogeneration and chiller products, the engines have proven to be cost-effective and reliable. In 2009, in response to the changing regulatory requirements for stationary engines, our research team developed an economically feasible process for removing air pollutants from the engine exhaust. This technology's U.S. and foreign patents were granted beginning in October 2013 with other domestic and foreign patents granted or applications pending. Branded Ultera®, the ultra-clean emissions technology repositions our engine driven products in the marketplace, making them comparable environmentally with other technologies such as fuel cells, but at a much lower cost and greater efficiency. Because of this breakthrough design for emission control, multiple Tecogen CHP modules fitted with the patented Ultera control technology have been permitted to the current regulatory limits in the Los Angeles area. In 2018, a group of natural gas engine-generators upfitted with the Ultera system were successfully permitted in the same Los Angeles region to unrestricted operation, the first natural gas engines to do so without operating time limits or other exemption. These engines were permitted to levels matching the California Air Resources Board ("CARB") 2007 emissions requirements, the same emissions standard used to certify fuel cells, and the same emissions levels as a state-of-the-art central power plant. We now offer our Ultera emissions control technology as an option on all our products or as a stand-alone application for the retrofitting of other rich-burn spark-ignited reciprocating internal combustion engines such as the engine-generators described above.

Our CHP products are sold directly to customers by our in-house marketing team, and by established sales agents and representatives. Although we may, from time to time, have one or a few customers who may represent more than 10% of our product revenue for a given year, we are not dependent on the recurrence of revenue from those customers. Our product revenue is such that customers may make a large purchase once and may not ever make a purchase again because our equipment may remain in operation for 30 or more years. Therefore, our product revenue model is not dependent on recurring sales transactions from the same customer. Our service revenue, on the other hand, does lend itself to recurring revenue from particular customers. We currently do not have any service revenue customers who make up more than 10% of our total revenues on an annual basis.

Our cogeneration, heat pump, and chiller modules are built to order and revenue is recognized upon shipment. The lead time to build and deliver a unit depends on its customized configuration and is approximately 12 to 14 weeks for a chiller and 6 to 8 weeks for a cogeneration or heat pump from the execution of a purchase order.

Product Service

We provide long-term maintenance contracts, parts sales, and turnkey installation for our products through a network of ten well-established field service centers in California, the Midwest, the Northeast, the Southeast, and Toronto, Canada. These centers are staffed by full-time Company technicians, working from local leased facilities which provide offices and warehouse space for inventory. We encourage customers to provide internet connections to our units so that we may maintain remote communications with the installed equipment. For connected installations, the machines are contacted daily to download their status and provide regular operational reports (daily, monthly, and quarterly) to our service managers. This communication link is used to support the diagnostic

efforts of our service staff, and to send messages to pre-programmed phones if a unit has experienced an unscheduled shutdown. In many cases, communications received by service technicians from connected devices allow for proactive maintenance, minimizing equipment downtime and improving operating efficiency for the customer.

We strive to maintain product service contracts for many years, and work to maintain the integrity and performance of our equipment. Our products have a long history of reliable operation. Since 1995, we have had a remote monitoring system in place that connects to hundreds of units daily and reports their “availability,” which is the amount of time a unit is running or is ready to run. More than 80% of the units operate above 90% availability, with the average being 93.8%. Our factory service agreements have directly impacted these positive results and represent an important long-term annuity-like stream of revenue for the Company.

New equipment sold beginning in 2016 and select upgrades to the existing installed equipment fleet includes an industrial internet solution which enables Tecogen to collect, analyze, and manage valuable asset data continuously and in real-time. This provides the service team with improved insight into the functionality of our installed CHP fleet. Specifically, it enables the service department to perform remote monitoring and diagnostics and to view system results in real time via a computer, smart phone or tablet. Consequently, we can better utilize monitoring data ensuring customers are capturing maximum possible savings and efficiencies from their installation. Through constant monitoring and analysis of equipment data, Tecogen expects to enhance the performance of installed equipment by ensuring machinery consistently operates at peak performance and is available to deliver maximum potential value for customers. In 2018 we migrated our cloud-based system from a third-party system to our CHP Insight® system developed in-house to access and store operating data on the cloud, and provide user interface features specific to CHP operation as well as sophisticated data analysis tools.

Energy Production

Our wholly owned subsidiary, American DG Energy Inc. (“ADGE”), distributes, owns and operates clean, on-site energy systems that produce electricity, hot water, heat, and cooling. ADGE owns the equipment that it installs at customers' facilities and sells the energy produced by these systems to customers on a long-term contractual basis. ADGE utilizes energy equipment supplied by Tecogen and other cogeneration manufacturers. 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 on-site. ADGE also distributes and operates water chiller systems for building cooling applications that operate in a similar manner, except that the engines in the water chiller systems drive a large air-conditioning compressor while recovering heat for hot water.

Cogeneration systems reduce the amount of electricity that a customer must purchase from the local utility and produce valuable heat and hot water on-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 dioxide, or CO₂, produced by replacing a portion of the traditional energy supplied by the electric grid and conventional hot water boilers. Distributed generation of electricity, or DG, 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.

We believe that the primary opportunity for DG energy and equipment sales is in regions of the U.S. where commercial electricity rates exceed \$0.12 per kW hour, or kWh, which is predominantly in the Northeast and California. 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. We also 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.

Sales & Distribution

Our products are sold directly to end-users by our sales team and by established sales agents and representatives. Various agreements are in place with distributors and outside sales representatives who are compensated by commissions for certain territories and product lines. Sales through our in-house team or sales that are not covered by a representative's territory carry no or nominal commissions. Our product sales cycle exhibits typical seasonality for the HVAC industry with sales of chillers generally stronger in the warmer months while heat pump sales are stronger in the cooler months.

Markets and Customers

Worldwide, stationary power generation applications vary from huge central stationary generating facilities (traditional electric utility providers) to back-up generators as small as 2 kW. Historically, power generation in most developed countries such as the United States has been part of a regulated central utility system utilizing high-temperature steam turbines powered by fossil-fuels. This turbine technology, though steadily refined over the years, reached a maximum efficiency (where efficiency means electrical energy output per unit of fuel energy input) of approximately 40%.

Distributed power generation ("DG") has been successfully implemented by others in large industrial installations over 10 Megawatts ("MW"), where the market has been growing for a number of years and is increasingly being accepted in smaller sized units because of technology improvements, increased energy costs, and better DG economics. We believe that our target market for DG, 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 of this market.

Developments related primarily to the deregulation of the utility industry as well as significant technological advances have broadened the range of power supply choices available to all types of customers. CHP, which harnesses waste energy from power generation processes and puts it to work for other uses on-site, can boost the energy conversion efficiency to nearly 90%, a better than two-fold improvement over the average efficiency of a fossil fuel plant. Generating power at the point of consumption rather than through central power plants eliminates the cost, complexity, and inefficiency associated with electric transmission and distribution. The implications of the CHP distributed generation approach are significant. Management believes that if CHP were applied on a large scale, global fuel usage would be significantly curtailed and the utility grid made more resilient.

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

Cogeneration and chiller products can often reduce the customer's operating costs (for the portion of the facility loads to which they are applied) by approximately 30% to 60% based on Company estimates, which provides an excellent rate of return on the equipment's capital cost in many areas of the country with high electricity rates. Our chillers are especially suited to regions where utilities impose extra charges during times of peak usage, commonly called "demand" charges. In these cases, the gas-fueled chiller reduces the use of electricity during the summer, the costliest time of year.

On-site CHP not only eliminates the loss of electric power during transmission, but also offsets the capital expense of upgrading or expanding the utility infrastructure. The national electric grids of many developed countries are already challenged to keep up with existing power demand. In addition, the transmission and distribution network operate near capacity in a majority of urban areas. Decentralizing power generation by installing equipment at customer sites not only relieves the capacity burden on existing power plants, but also

lessens the burden on transmission and distribution lines. This ultimately improves the grid's reliability and reduces the need for costly upgrades.

Certain Developments

ADGE Merger

On May 18, 2017, holders of approximately 71% of the ADGE's outstanding common stock approved the proposed acquisition of ADGE ("Merger") and holders of approximately 55% of our outstanding stock approved the issuance of our shares in the Merger. Consequently, on that day we completed our acquisition, by means of a stock-for-stock merger, of 100% of the outstanding common shares of ADGE. As a result, ADGE became our wholly owned subsidiary.

Liquidity

On May 4, 2018, we and our wholly-owned subsidiaries, American DG Energy Inc., and TTcogen LLC entered into a Credit Agreement with Webster Business Credit Corporation ("Lender") that provided us with a line of credit of up to \$10 million on a revolving and secured basis, with availability based on our accounts receivable, raw materials, and finished goods, during a three year period until May 4, 2021. The line of credit was used to repay the amounts due to Mr. John Hatsopoulos under a promissory note assumed by us in connection with the merger of American DG Energy Inc. into a subsidiary of the Company, and for working capital for the Company. On April 17, 2020 we received a Paycheck Protection Program Loan in the amount of \$1.87 million, and on May 11, 2020 we paid off the balance of the line of credit and terminated the credit agreement with Webster Business Credit Corporation. We currently have liquidity adequate liquidity to maintain our business for at least the next two quarters.

Energy Sales Agreements

On December 14, 2018, we entered into agreements relating to the sale of two energy purchase agreements and related energy production systems for \$2 million, and on March 5, 2019 we entered into agreements relating to the sale of six energy purchase agreements and related energy production systems for \$5 million. In connection with the sale, we entered into agreements to provide billing and asset management services and operations and maintenance services for agreed fees for the duration of the energy purchase agreements, pursuant to which the Company guarantees certain minimum collections and is entitled to receive fifty percent of the excess of collections over agreed minimum thresholds.

The Offering

Risks Factors

Investing in our securities involves a high degree of risk. Please see the risk factors discussed under the heading "*Risk Factors*" below and under Item 1A of our most recent Annual Report on Form 10-K, as supplemented by our Current Report filed with the SEC on April 14, 2020, and Part II of our Quarterly Reports on Form 10-Q, and other filings we make with the SEC, which are incorporated by reference in this prospectus.

Corporate Information

We were incorporated in the State of Delaware on September 15, 2000. Our principal executive offices are located at, and our mailing address is, 45 First Avenue, Waltham, Massachusetts 02451. Our main telephone number is (781) 466-6400. Our corporate website address is: www.tecogen.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus and should not be relied upon with respect to this offering.

RISK FACTORS

An investment in our securities is highly speculative and involves a high degree of risk. Before deciding to invest in our shares of common stock, you should carefully consider the risk factors set forth under Item 1A of our most recent Annual Report on Form 10-K as amended or supplemented, and the information contained in this reoffer prospectus, as updated by our subsequent filings under the Securities Exchange Act, which are incorporated herein by reference, before you decide to acquire our shares. Such risks are not the only ones facing our company. Additional risks not presently known to us or which we currently consider immaterial may also adversely affect our company. If any of such risks actually occur, our business, financial condition and operating results could be materially adversely affected. In such case, the trading price of our common stock could decline, and you could lose a part of your investment.

USE OF PROCEEDS

We will not receive any proceeds from this offering. However, if any of the selling shareholders exercise options granted to them under either the 2005 Plan or the 2006 Plan to acquire shares of our common stock to be resold pursuant to this reoffer prospectus, we would receive the option exercise price and expect to use such proceeds for general working capital purposes.

SELLING SHAREHOLDERS

All of the shares of our common stock registered for resale under the Registration Statements, as amended, of which this reoffer prospectus forms a part will be owned, prior to the offer and sale of such shares, by the selling shareholders upon vesting and exercise of incentive or non-qualified stock options, or the vesting of bonus shares, deferred stock awards, performance share awards, or restricted stock awards. We expect to supplement this prospectus from time to time with the names of additional selling shareholders and/or amounts of shares to be offered for sale by such selling shareholders, including upon our grant and issuance of additional options pursuant to the 2006 Plan.

We have registered the shares of common stock covered by this reoffer prospectus for the selling shareholders. As used in this prospectus, selling shareholders include the pledgees, donees, transferees, or others who may later hold the selling shareholders' interests. We are paying the costs and fees of registering the shares of our common stock covered by this prospectus, but the selling shareholders will pay any brokerage commissions, discounts, or other expense relating to the sale of such shares.

The following table sets forth as of July 23, 2020:

- the name and principal position of each person who is, or may be deemed, an affiliated selling shareholder, and certain non-affiliated selling shareholders;
- the number and percentage of shares of common stock owned beneficially, directly or indirectly, by each selling shareholder before the offering;
- the number of shares of common stock to be offered by the selling shareholders pursuant to this reoffer prospectus; and
- the number and percentage of shares of common stock to be owned by each selling shareholder following the sale of the shares pursuant hereto.

We may amend or supplement this prospectus from time to time to update the disclosures set forth in the table, below. Because the selling shareholders identified in the table as supplemented may sell some or all of the shares owned by them which are included in this prospectus, and because there are currently no agreements, arrangements, or understandings with respect to the sale of any such shares, no estimate can be given as to the number of shares available for resale hereby that will be held by the selling shareholders upon termination of the

offering made hereby. We have assumed, therefore, for purposes of the following table as it may be amended or supplemented, that the selling shareholders will sell all of the shares owned by them which are being offered hereby, but will not sell any other shares of our common stock they presently own. To our knowledge, none of the selling shareholders are broker-dealers or affiliates of broker-dealers.

Because currently we do not satisfy the registrant requirements for use of Form S-3, the amount of shares of our common that may be reoffered or resold by means of this prospectus by a selling shareholder, and any other person with whom he or she is acting in concert for purpose of selling our securities, may not exceed, during any three month period, the amount specified in Rule 144(e) under the Securities Act.

<u>Name of Selling Shareholder</u>	<u>Number of Shares Beneficially Owned Before Offering</u> ⁽¹⁾	<u>Percent of Common Stock Owned Before Offering</u> ⁽¹⁾	<u>Number of Shares Being Offered Hereby</u>	<u>Number of Shares Owned After Offering</u> ⁽¹⁷⁾	<u>Percent of Common Stock Owned After Offering</u> ⁽¹⁷⁾
Benjamin M. Locke CEO, PFO and Director	342,018 ⁽²⁾	1.33	736,800 ⁽⁹⁾	5,218	*
Robert Panora President	276,573 ⁽³⁾	1.1	337,723 ⁽¹⁰⁾	138,850	*
John K. Whiting, IV General Counsel	30,636 ⁽⁴⁾	*	310,000 ⁽¹¹⁾	636	*
John N. Hatsopoulos Lead Director	2,347,596 ⁽⁵⁾	9.44	12,723 ⁽¹²⁾	2,334,873	9.4
Angelina M. Galiteva Chairperson	75,000 ⁽⁶⁾	*	125,000 ⁽¹³⁾	50,000	*
Ahmed Ghoniem Director	62,723 ⁽⁷⁾	*	137,723 ⁽¹⁴⁾	25,000	*
Deanna Petersen Director	9,200 ⁽⁸⁾	*	109,200 ⁽¹⁵⁾	--	*
Earl R. Lewis, III Director	200,000	*	100,000 ⁽¹⁶⁾	200,000	*
Fred Holubow Director	--	--	100,000 ⁽¹⁶⁾	--	--

* Less than 1%.

- (1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Securities Exchange Act and is generally determined by voting power and/or investment power with respect to securities. Unless otherwise noted, all shares of common stock listed above are owned of record by each individual named as beneficial owner and such individual has sole voting and dispositive power with respect to the shares of common stock owned by each of them. Such person or entity's percentage of ownership is determined by assuming that any options or convertible securities held by such person which are exercisable within 60 days from the date hereof have been exercised or converted as the case may be. Except as otherwise indicated, the address of each selling shareholder is c/o Tecogen Inc., 45 First Avenue, Waltham, Massachusetts 02451.

- (2) Includes: (a) 5,218 shares held directly by Mr. Locke; (b) 36,800 shares underlying currently exercisable options granted pursuant to the 2005 Plan; and (c) 300,000 shares underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include the following shares underlying options granted pursuant to the 2006 Plan: (A) 100,000 shares underlying options that are not currently exercisable, 50,000 of which will vest and become exercisable on May 31, 2021, and 50,000 of which will vest and become exercisable on May 31, 2022; and (B) 300,000 shares underlying options that are not currently exercisable which will vest and become exercisable as follows: (i) 50% of such options will vest and become exercisable upon Tecogen reporting two consecutive fiscal quarters of positive adjusted Earnings Before Income Taxes, Depreciation and Amortization (EBITDA) in excess of 2% of revenue; and (ii) 50% of such options will vest and become exercisable upon Tecogen reporting four consecutive fiscal quarters of positive adjusted Earnings Before Income Taxes, Depreciation and Amortization (EBITDA) in excess of 3% of revenue ("*Executive Option Vesting Schedule and Criteria*").
- (3) Includes: (a) 138,850 shares held directly by Mr. Panora; and (b) 137,723 shares underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include 200,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable in accordance with the Executive Option Vesting Schedule and Criteria.
- (4) Includes: (a) 636 shares held directly by Mr. Whiting; and (b) 30,000 shares underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include the following shares underlying options granted pursuant to the 2006 Plan: (A) 5,000 shares underlying options that are not currently exercisable, 2,500 of which will vest and become exercisable on January 16, 2021, and 2,500 of which will vest and become exercisable on January 16, 2022; (B) 37,500 shares underlying options that are not currently exercisable, 12,500 of which will vest and become exercisable on December 11, 2020, 12,500 of which will vest and become exercisable on December 11, 2021, and 12,500 of which will vest and become exercisable on December 11, 2022; (C) 37,500 shares underlying options that are not currently exercisable, 12,500 of which will vest and become exercisable on June 11, 2021, 12,500 of which will vest and become exercisable on June 11, 2022, and 12,500 of which will vest and become exercisable on June 11, 2023, and (D) 200,000 shares underlying options which will vest and become exercisable in accordance with the Executive Option Vesting Schedule and Criteria.
- (5) Based solely upon: (a) the Schedule 13G/A filed by Mr. John N. Hatsopoulos on March 26, 2019 and the Form 4 filed by Mr. Hatsopoulos on April 24, 2020. Based on the Schedule 13G/A and Form 4/A the beneficial ownership of Mr. Hatsopoulos is the following: (1) 180,351 shares of common stock held directly by Mr. Hatsopoulos; (2) 1,039,480 shares of common stock held by the Nia M. Hatsopoulos Jephson 2011 Irrevocable Trust, for which Mr. Hatsopoulos is the trustee; (3) 1,039,480 shares of common stock held by the Alexander J. Hatsopoulos 2011 Irrevocable Trust, for which Patricia Hatsopoulos, Mr. Hatsopoulos' wife, is the trustee; (4) 3,325 shares of common stock held in an individual retirement account for Mrs. Hatsopoulos; (5) 44,012 shares held in Pat Ltd., a joint account maintained by Mr. Hatsopoulos and Mrs. Hatsopoulos; (6) 28,225 shares of common stock held by Mrs. Hatsopoulos; and (7) 12,723 shares of common stock underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include the following shares with respect to which Mr. Hatsopoulos disclaims beneficial ownership: (1) 808,339 shares of Common stock held in The John N. Hatsopoulos 1989 Family Trust for the benefit of Nia Maria Hatsopoulos, of which Ann Marie Pacheco is the sole trustee; (2) 812,325 shares of common stock held in The John N. Hatsopoulos 1989 Family Trust for the benefit of Alexander J. Hatsopoulos, or which Ms. Ann Marie Pacheco is the sole trustee; and (3) 571,538 shares of common stock held in The John N. Hatsopoulos Family Trust 2007, of which Mr. Yiannis Monovoukas is the sole trustee.
- (6) Includes: (a) 50,000 shares held directly by Ms. Galiteva; and (b) 25,000 shares underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (7) Includes: (a) 25,000 shares held directly by Mr. Ghoniem; and (b) 37,723 shares underlying currently exercisable options granted pursuant to the 2006 Plan. Does not include 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (8) Represents shares underlying currently exercisable options granted pursuant to the 2005 Plan. Does not include 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (9) Includes: (a) 36,800 shares underlying currently exercisable options granted pursuant to the 2005 plan; (b) 300,000 shares underlying currently exercisable options granted pursuant to the 2006 Plan; (c) 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable, 50,000 of which will vest and become exercisable on May 31, 2021, and 50,000 of which will vest and become exercisable on May 31, 2022; and (b) 300,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable in accordance with the Executive Option Vesting Schedule and Criteria.
- (10) Includes the following shares underlying options granted pursuant to the 2006 Plan: (a) 137,723 shares underlying currently exercisable options; and (b) 200,000 shares underlying options that are not currently exercisable which will vest and become exercisable in accordance with the Executive Option Vesting Schedule and Criteria.
- (11) Includes the following shares underlying options granted pursuant to the 2006 Plan: (a) 30,000 shares underlying currently exercisable options; (b) 5,000 shares underlying options that are not currently exercisable, 2,500 of which will vest and become exercisable on January 16, 2021, and 2,500 of which will vest and become exercisable on January 16, 2022; (c) 37,500 shares underlying options that are not currently exercisable, 12,500 of which will vest and become exercisable on December 11, 2020, 12,500 of which will vest and become exercisable on December 11, 2021, and 12,500 of which will vest and become exercisable on December 11, 2022; (d) 37,500 shares underlying options that are not currently exercisable, 12,500 of which will vest and become exercisable on June 11, 2021, 12,500 of which will vest and become exercisable on June 11, 2022, and 12,500 of which will vest and become exercisable on June 11, 2023, and (e) 200,000 shares underlying options which will vest and become exercisable in accordance with the Executive Option Vesting Schedule and Criteria.

- (12) Represents shares underlying currently exercisable options granted pursuant to the 2006 Plan.
- (13) Includes the following shares underlying options granted pursuant to the 2006 Plan: (a) 25,000 shares underlying options that are currently exercisable; and (b) 100,000 shares underlying options that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (14) Includes the following shares underlying options granted pursuant to the 2006 Plan: (a) 37,723 shares underlying options that are currently exercisable; and (b) 100,000 shares underlying options that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (15) Includes: (a) 9,200 shares underlying options granted pursuant to the 2005 Plan that are currently exercisable; and (b) 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on each of the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (16) Represents 100,000 shares underlying options granted pursuant to the 2006 Plan that are not currently exercisable which will vest and become exercisable as to 25% of such options commencing on the first, second, third and fourth anniversaries of the date of grant, July 9, 2020.
- (17) *“Number of Shares Owned After Offering”* and *“Percent of Common Stock Owned After Offering”* assume the sale of all of the shares offered by each selling shareholder under this reoffer prospectus but no other purchases or sales of our shares by the other selling shareholders. Based upon 24,850,261 shares of common stock issued and outstanding on July 23, 2020.

PLAN OF DISTRIBUTION

Each of the selling shareholders of our common stock and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their shares of common stock on the OTC Markets LLC's OTCQX or such other stock exchange, market or trading facility on which the shares are then traded or in private transactions. These sales may be at fixed or negotiated prices. A selling shareholder may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- broker-dealers may agree with the selling shareholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale;
or
- any other method permitted pursuant to applicable law.

The selling shareholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling shareholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission and in the case of a principal transaction a mark-up or markdown in compliance with FINRA Rule 2121 and guidance thereunder.

In connection with the sale of the common stock or interests therein, the selling shareholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling shareholders may also sell shares of the common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to broker-dealers that in turn may sell these securities. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The selling shareholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. To our knowledge, no selling shareholder has any written or oral agreement or understanding, directly or indirectly, with any person to distribute the common stock.

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. Because selling shareholders may be deemed to be “underwriters” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act. There is no underwriter or coordinating broker acting in connection with the proposed sale of the resale shares by the selling shareholders.

The resale shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Securities Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling shareholders will be subject to applicable provisions of the Securities Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of the common stock by the selling shareholders or any other person. We will make copies of this prospectus available to the selling shareholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale.

LEGAL MATTERS

The validity of the common stock issuable under the 2005 Plan and the 2006 Plan has been passed upon for us by Sullivan & Worcester LLP, Boston, Massachusetts.

EXPERTS

Our financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019, and incorporated by reference in this reoffer prospectus, have been so incorporated in reliance on the report of Wolf & Company, P.C., independent registered public accountants, given on the authority of said firm as experts in auditing and accounting.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION

Our Amended and Restated Certificate of Incorporation provides that we will indemnify our officers and directors in accordance with Delaware General Corporation Law. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provision, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is unenforceable. In the event that a claim for indemnification against such liabilities is asserted by one of our directors, officers or controlling person in connection with the securities being registered herein, we will, unless, in the opinion of our legal counsel, the matter has been settled by controlling precedent, submit the question of whether such indemnification is against public policy to a court of appropriate jurisdiction. We will then be governed by the court's decision.



TECOGEN INC.

Shares of Common Stock

REOFFER PROSPECTUS

July 28, 2020

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents, and any amendments thereto, filed by the Company with the SEC under the Securities Exchange Act of 1934, as amended (“*Securities Exchange Act*”) are incorporated by reference in this Registration Statement:

- Our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 12, 2020
- Our Current Report on Form 8-K filed with the SEC on March 18, 2020
- Our Current Report on Form 8-K filed with the SEC on April 14, 2020
- Our Current Report on Form 8-K filed with the SEC on April 17, 2020
- Our Proxy Statement filed with the SEC on April 21, 2020
- Our Current Report on Form 8-K filed with the SEC on May 12, 2020
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed with the SEC on May 14, 2020
- Our Current Report on Form 8-K filed with the SEC on May 15, 2020
- Our Current Report on Form 8-K filed with the SEC on May 29, 2020
- Our Current Report on Form 8-K filed with the SEC on June 5, 2020
- Our Current Report on Form 8-K filed with the SEC on July 8, 2020
- Our Current Report on Form 8-K filed with the SEC on July 21, 2020
- Description of our securities incorporated by reference from Exhibit 4.4 to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on March 12, 2020

In addition, all reports and other documents filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act subsequent to the date of this Post-Effective Amendment No. 1 to the Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereunder have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such reports or documents.

Any statement contained herein or in a document incorporated or deemed incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law (“*DGCL*”) allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. We have included such a provision in our Amended and Restated Certificate of Incorporation.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he is or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances. We have included such a provision in our Amended and Restated Certificate of Incorporation.

The indemnification provisions contained in our Amended and Restated Certificate of Incorporation are not exclusive of any other rights to which a person may be entitled by law, agreement, vote of stockholders or disinterested directors or otherwise.

In addition, we maintain insurance on behalf of our directors and executive officers that insures them against any liability asserted against them in their capacities as directors or officers or arising out of such status.

These indemnification provisions may be sufficiently broad to permit indemnification of directors and officers for liabilities, including reimbursement of expenses incurred, arising under the Securities Act.

INSOFAR AS INDEMNIFICATION FOR LIABILITIES ARISING UNDER THE SECURITIES ACT MAY BE PERMITTED TO DIRECTORS, OFFICERS OR PERSONS CONTROLLING THE COMPANY PURSUANT TO THE FOREGOING PROVISIONS, THE COMPANY HAS BEEN INFORMED THAT IN THE OPINION OF THE SECURITIES AND EXCHANGE COMMISSION, SUCH INDEMNIFICATION IS AGAINST PUBLIC POLICY AS EXPRESSED IN THE SECURITIES ACT AND IS THEREFORE UNENFORCEABLE.

Other Arrangements

The Company maintains a “claims made” officers and directors liability insurance policy with coverage limits of \$5,000,000 and a maximum \$1,000,000 deductible amount for each claim.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The following exhibits are filed as part of this Registration Statement:

<u>Exhibit No.</u>	<u>Exhibit Description</u>	<u>Incorporated by Reference</u>		<u>Filed</u> <u>Herewith</u>
		<u>Form</u>	<u>Filing Date</u>	
3.1	Form of Common Stock Certificate	S-1/A	06/27/2014	
3.2	Amended and Restated Certificate of Incorporation	S-1/A	06/27/2014	
3.3	Amended and Restated Bylaws	S-1/A	06/27/2014	
4.1	Description of Securities	10-K	03/12/2020	
10.1	Tecogen Inc. 2006 Stock Incentive Plan, as amended and restated on November 1, 2016	10-K	03/29/2019	
10.2	American DG Energy Inc. 2005 Stock Incentive Plan			X
23.1	Consent of Wolf & Company, P.C.			X
24.1	Power of Attorney of certain directors and officers of the Registrant (included on signature page of this Post-Effective Amendment No. 1 to Registration Statement on Form S-8).			X

Item 9. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

- (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement; and
- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

Provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(2) That, for the purpose of determining liability under the Securities Act of 1933, each such post-effective amendment shall be deemed a new registration statement relating to the securities offered therein, and the offering of those securities at that time shall be deemed to be the initial bona fide offering thereof; and

(3) To remove from registration by means of post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in said Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statements to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on July 28, 2020.

TECOGEN INC.

By: /s/Benjamin M. Locke
Benjamin M. Locke
Chief Executive Officer and Director
(Principal Executive Officer and Principal Financial Officer)

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Benjamin M. Locke and John K. Whiting, IV, or either of them, his or her true and lawful attorney-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Post-Effective Amendment No. 1 to the Form S-8 Registration Statements, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granted unto said attorney-in-fact and agents, full power and authority to do and to perform each and every act and thing required and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents, or any of them or their substitutes or substitutes, could lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statements has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Angelina M. Galiteva</u> Angelina M. Galiteva	Director and Chairperson of the Board	July 28, 2020
<u>/s/ John N. Hatsopoulos</u> John N. Hatsopoulos	Lead Director	July 28, 2020
<u>/s/ Benjamin M. Locke</u> Benjamin M. Locke	Chief Executive Officer and Director (Principal Executive Officer and Principal Financial Officer)	July 28, 2020
<u>/s/ Ahmed F. Ghoniem</u> Ahmed F. Ghoniem	Director	July 28, 2020
<u>/s/ Deanna Petersen</u> Deanna Petersen	Director	July 28, 2020
<u>/s/ Earl R. Lewis, III</u> Earl R. Lewis, III	Director	July 28, 2020
<u>/s/ Fred Holubow</u> Fred Holubow	Director	July 28, 2020

**AMERICAN DG ENERGY INC.
2005 STOCK INCENTIVE PLAN**

1. Purposes of the Plan.

This 2005 Stock Incentive Plan (the "Plan"), as amended to date, is intended to provide incentives (a) to the officers and employees of American DG Energy Inc., a Delaware corporation (the "Company"), and any parent or subsidiary of the Company, by providing such officers and employees with opportunities to purchase stock in the Company pursuant to options granted hereunder which qualify as "incentive stock options" under Section 422(b) of the Internal Revenue Code of 1986, as amended (the "Code") ("ISO" or "ISOs"); (b) to directors, officers, employees, consultants and advisors of the Company and any present or future parent, subsidiary or affiliate of the Company (hereinafter collectively "Related Corporations") by providing them with opportunities to purchase stock in the Company pursuant to options granted hereunder which do not qualify as ISOs ("Non-Qualified Option" or "Non-Qualified Options"); (c) to directors, officers, employees, consultants and advisors of the Company and Related Corporations by providing them with opportunities to receive awards of stock in the Company whether such stock awards are in the form of bonus shares, deferred stock awards, or of performance share awards ("Awards"); and (d) to directors, officers, employees, consultants and advisors of the Company and Related Corporations by providing them with opportunities to make direct purchases of restricted stock in the Company ("Restricted Stock Purchases"). Both ISOs and Non-Qualified Options are referred to hereafter individually as an "Option" and collectively as "Options". Options, Awards and authorizations to make Restricted Stock Purchases are referred to hereafter individually as a "Stock Right" and collectively as "Stock Rights". As used herein, the terms "parent" and "subsidiary" mean "parent corporation" and "subsidiary corporation", respectively, as those terms are defined in Section 424 of the Code.

2. Administration of the Plan.

(a) *Board or Committee Administration.* This Plan shall be administered by the Board of Directors of the Company (the "Board"). The Board may appoint a Compensation Committee or Human Resources Committee (as the case may be, the "Committee") of two (2) or more of its members to administer this Plan and to grant Stock Rights hereunder, provided such Committee is delegated such powers in accordance with applicable state law. (All references in this Plan to the "Committee" shall mean the Board if no such Compensation Committee or Stock Incentive Plan Committee has been so appointed). If the Company or any Related Corporation registers any class of any equity security pursuant to Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), this Plan shall be administered in accordance with the applicable rules set forth in Rule 16b-3 or any successor provisions of the Exchange Act ("Rule 16b-3"). From and after the date the Company becomes subject to Section 162(m) of the Code with respect to compensation earned under this Plan, each member of the Committee shall also be an "outside director" within the meaning of Section 162(m) of the Code and the regulations promulgated thereunder.

(b) *Authority of Board or Committee.* Subject to the terms of this Plan, the Committee shall have the authority to: (i) determine the employees of the Company and any Related Corporation (from among the class of employees eligible under paragraph 3 to receive ISOs) to whom ISOs may be granted, and to determine (from among the class of individuals and entities eligible under paragraph 3 to receive Non-Qualified Options and Awards and to make Restricted Stock Purchases) to whom Non-Qualified Options, Awards and authorizations to make Restricted Stock Purchases may be granted; (ii) determine the time or times at which Options or Awards may be granted or Restricted Stock Purchases made; (iii) determine the exercise price of shares subject to each Option, which price shall not be less than the minimum price specified in paragraph 6, and the purchase price of shares subject to each Restricted Stock Purchase; (iv) determine whether each Option granted shall be an ISO or a Non-Qualified Option; (v) determine (subject to paragraph 8) the time or times when or what conditions must be satisfied before each Option shall become exercisable and the duration of the exercise period; (vi) determine whether restrictions such as transfer restrictions, repurchase options and "drag along" rights and rights of first refusal are to be imposed on shares subject to Options, Awards and Restricted Stock Purchases and the nature of such restrictions, if any; (vii) impose such other terms and conditions with respect to capital stock issued pursuant to Stock Rights not inconsistent with the terms of this Plan as it deems necessary or desirable; and (viii) interpret the Plan and prescribe and rescind rules and regulations relating to it.

If the Committee determines to issue a Non-Qualified Option, the Committee shall take whatever actions it deems necessary, under the Code and the regulations promulgated thereunder, to ensure that such Option is not treated as an ISO. The interpretation and construction by the Committee of any provisions of the Plan or of any Stock Right granted under it shall be final unless otherwise determined by the Board. The Committee may from time to time adopt such rules and

regulations for carrying out the Plan as it may deem best. No member of the Board or the Committee shall be liable for any action or determination made in good faith with respect to the Plan or any Stock Right granted under it.

(c) *Delegation of Authority to Grant Awards to Officer.* Without limiting the foregoing, the Board, in its discretion, may also delegate to a single officer of the Company who is a member of the Board (to the extent consistent with state law) all or part of the Board's or Committee's authority and duties with respect to the granting of Stock Rights to individuals who are not subject to the reporting and other provisions of Section 16 of the Exchange Act or "covered employees" within the meaning of Section 162(m) of the Code, subject to such limitations as the Board or the Committee deems appropriate, including without limitation as to the amount of Stock Rights that may be granted during the period of delegation, and guidelines as to the determination of the exercise price of any Option, the purchase price of other Stock Rights and the setting of vesting schedules or criteria. Such officer (the "Delegated Officer") shall act as a one member committee of the Board, and shall in any event be subject to the same limitations as are applicable to the Committee. References to the Committee in this Plan shall also include the Delegated Officer, but only to the extent consistent with the authorities and duties delegated to the Delegated Officer by the Board. The Board may revoke or amend the terms of a delegation at any time but such action shall not invalidate any prior actions of the Delegated Officer that were consistent with the terms of this Plan.

(d) *Committee Actions.* The Committee may select one of its members as its chairman and shall hold meetings at such time and places as it may determine. Acts by a majority of the Committee, acting at a meeting (whether held in person or by teleconference), or acts reduced to or approved in writing by all of the members of the Committee, shall be the valid acts of the Committee. From time to time the Board may increase the size of the Committee and appoint additional members thereof, remove members (with or without cause) and appoint new members in substitution therefor, fill vacancies however caused, or remove all members of the Committee and thereafter directly administer this Plan, subject to compliance with paragraph 2(a).

(e) *Grant of Stock Rights to Board Members.* Stock Rights may be granted to members of the Board, subject to compliance with Rule 16b-3 when required by paragraph 2(a). All grants of Stock Rights to members of the Board shall in all respects be made in accordance with the provisions of this Plan applicable to other eligible persons.

3. Eligible Employees and Others.

ISOs may be granted to any employee of the Company or any parent or subsidiary of the Company. Those officers and directors of the Company who are not employees of the Company or any parent or subsidiary of the Company may not be granted ISOs under this Plan. Non-Qualified Options, Awards and authorizations to make Restricted Stock Purchases may be granted to any employee, officer or director (whether or not also an employee) of or consultant or advisor to the Company or any Related Corporation. The Committee may take into consideration a recipient's individual circumstances in determining whether to grant a Stock Right. Granting a Stock Right to any individual or entity shall neither entitle that individual or entity to, nor disqualify him or her from, participation in any other grant of Stock Rights.

4. Stock.

The stock subject to Stock Rights shall be the authorized but unissued shares of Common Stock of the Company (the "Common Stock"), or shares of Common Stock reacquired by the Company in any manner. The aggregate number of shares of Common Stock which may be issued pursuant to this Plan is 5,000,000, subject to adjustment as provided in paragraph 13 or amendment as provided in Section 15. Any such shares may be issued pursuant to the exercise of Stock Rights, so long as the aggregate number of shares so issued does not exceed the number of such shares authorized under this paragraph 4.

5. Granting of Stock Rights.

Stock Rights may be granted under this Plan at any time on or after October 1, 2005 and prior to October 1, 2015. The date of grant of a Stock Right under this Plan will be the date specified by the Committee at the time it grants the Stock Right or such date that is specified in the instrument or agreement evidencing such Stock Right; provided, however, that such date shall not be prior to the date on which the Committee acts to approve the grant and that with respect to an ISO grant such date shall not be earlier than the date of commencement of employment of the employee granted the ISO. The Committee shall have the right, with the consent of the optionee, to convert an ISO granted under this Plan to a Non-Qualified Option pursuant to paragraph 17.

6. Minimum Option Price; ISO Limitations.

(a) *Price for ISOs.* The exercise price per share specified in the agreement relating to each ISO granted under this Plan shall not be less than the fair market value per share of Common Stock on the date of such grant. In the case of an ISO to be granted to an employee owning stock possessing more than ten percent (10%) of the total combined voting power of

all classes of stock of the Company, the price per share specified in the agreement relating to such ISO shall not be less than one hundred ten percent (110%) of the fair market value per share of Common Stock on the date of grant.

(b) *\$100,000 Annual Limitation on ISOs.* Each eligible employee may be granted ISOs only to the extent that, in the aggregate under this Plan and all other incentive stock option plans of the Company and any parent or subsidiary of the Company, such ISOs do not become exercisable for the first time by such employee during any calendar year in a manner which would entitle the employee to purchase more than \$100,000 in fair market value (determined at the time the ISOs were granted) of Common Stock in that year. Any Options granted to an employee in excess of such amount will be granted as Non-Qualified Options.

(c) *Determination of Fair Market Value.* If, at the time an Option is granted under the Plan, the Common Stock is publicly traded, "fair market value" shall be determined as of the last business day for which the prices or quotes discussed in this sentence are available prior to the date such Option is granted and shall mean (i) the average (on that date) of the high and low prices of the Common Stock on the principal national securities exchange on which the Common Stock is traded, if the Common Stock is then traded on a national securities exchange; or (ii) the last reported sale price (on that date) of the Common Stock on the NASDAQ National Market List, if the Common Stock is not then traded on a national securities exchange; or (iii) the closing bid price (or average of bid prices) last quoted (on that date) by an established quotation service for over-the-counter securities, if the Common Stock is not then traded on a national securities exchange and is not reported on the NASDAQ National Market List. However, if the Common Stock is not publicly traded at the time an Option is granted under the Plan, "fair market value" shall be deemed to be the fair value of the Common Stock as determined by the Committee after taking into consideration all factors in good faith it deems appropriate, including, without limitation, recent sale and offer prices of the Common Stock in private transactions negotiated at arm's length, if any.

7. Option Duration.

Subject to earlier termination as provided in paragraphs 9, 10, and 13(b), each Option shall expire on the date specified by, or shall have such duration as may be specified by, the Committee and set forth in the original stock option agreement granting such Option, but not more than ten years from the date of grant. Notwithstanding the foregoing, in the case of ISOs granted to an employee owning stock possessing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company, such ISOs shall expire not more than five years from the date of grant. Non-Qualified Options shall expire on the date specified in the agreement granting such Non-Qualified Options, subject to extension as determined by the Committee. ISOs, or any part thereof, that have been converted into Non-Qualified Options may be extended as provided in paragraph 17.

8. Exercise of Options.

Subject to the provisions of paragraphs 9 through 13, each Option granted under the Plan shall be exercisable as follows:

(a) *Vesting.* As set forth in paragraph 2(b), and subject to paragraphs 9 and 10 with respect to ISOs, the Committee shall determine the time or times when or what conditions must be satisfied before each Option shall become exercisable and the duration of the exercise period. The Committee may also specify such other conditions precedent as it deems appropriate to the exercise of an Option.

(b) *Full Vesting of Installments.* Once an installment becomes exercisable it shall remain exercisable until expiration or termination of the Option, unless otherwise specified by the Committee.

(c) *Partial Exercise.* Each Option or installment may be exercised at any time or from time to time, in whole or in part, for up to the total number of shares with respect to which it is then exercisable, provided that the Committee may specify a certain minimum number or percentage of the shares issuable upon exercise of any Option that must be purchased upon any exercise.

(d) *Acceleration of Vesting.* The Committee shall have the right to accelerate the date of exercise of any installment of any Option, despite the fact that such acceleration may (i) cause the application of Sections 280G and 4999 of the Code if a Change in Control Event, as defined below in paragraph 13(b), occurs, or (ii) disqualify all or part of the Option as an ISO.

9. Termination of Employment.

Subject to the provisions of paragraph 13(b), if an ISO optionee ceases to be employed by the Company and all Related Corporations other than by reason of death or disability as defined in paragraph 10, no further installments of his or her ISOs shall become exercisable following the date of such cessation of employment, and his or her ISOs shall terminate

after the passage of ninety (90) days from the date of termination of his or her employment, but in no event later than on their specified expiration dates, except to the extent that such ISOs (or unexercised installments thereof) have been converted into Non-Qualified Options pursuant to paragraph 17. Nothing in this Plan shall be deemed to give any grantee of any Stock Right the right to be retained in employment or other service by the Company or any Related Corporation for any period of time.

Notwithstanding anything contained in this paragraph 9 to the contrary, the Board or Committee may establish rules in particular stock option agreements with respect to Misconduct, as defined below, committed by a grantee of a Stock Right.

10. Death; Disability.

(a) *Death.* If an ISO optionee ceases to be employed by the Company and all Related Corporations by reason of his or her death, or if the employee dies within the thirty (30) day period after the employee ceases to be employed by the Company and all Related Corporations, any ISO of his or hers may be exercised, to the extent of the number of shares with respect to which he or she could have exercised it on the date of his or her death, by his or her estate, personal representative or beneficiary who has acquired the ISO by will or by the laws of descent and distribution, at any time prior to the earlier of the specified expiration date of the ISO or one (1) year from the date of such optionee's death.

(b) *Disability.* If an ISO optionee ceases to be employed by the Company and all Related Corporations by reason of his or her disability, he or she shall have the right to exercise any ISO held by the optionee on the date of termination of employment, to the extent of the number of shares with respect to which he or she could have exercised it on that date, at any time prior to the earlier of the specified expiration date of the ISO or one (1) year from the date of the termination of the optionee's employment. For the purposes of the Plan, the term "disability" shall mean "permanent and total disability" as defined in Section 22(e)(3) of the Code or successor statute.

11. Assignability.

Except for Non-Qualified Options which may be transferred for estate planning purposes to the extent provided in the instrument or agreement granting such Non-Qualified Options, no Stock Right shall be assignable or transferable by the grantee except by will or by the laws of descent and distribution, and during the lifetime of the grantee each Stock Right shall be exercisable only by the optionee. No Stock Right, and no right to exercise any portion thereof, shall be subject to execution, attachment, or similar process, assignment, or any other alienation or hypothecation. Upon any attempt so to transfer, assign, pledge, hypothecate, or otherwise dispose of any Stock Right, or of any right or privilege conferred thereby, contrary to the provisions thereof or hereof or upon the levy of any attachment or similar process upon any Stock Right, right or privilege, such Stock Right and such rights and privileges shall immediately become null and void. The foregoing shall not be construed to restrict the ability to assign or transfer shares of Common Stock issued upon the exercise or award of a Stock Right to the extent that the instrument or agreement granting such Stock Right permits such assignment or transfer.

12. Terms and Conditions of Stock Rights.

Stock Rights shall be evidenced by instruments (which need not be identical) in such forms as the Committee may from time to time approve. Such instruments shall conform to the terms and conditions set forth in paragraphs 6 through 11 hereof to the extent applicable and may contain such other provisions as the Committee deems advisable which are not inconsistent with this Plan. Without limiting the foregoing, such provisions may include transfer restrictions, rights of refusal, vesting provisions, repurchase rights, lock-up provisions and drag-along rights with respect to shares of Common Stock issuable upon exercise of Stock Rights, and such other restrictions applicable to shares of Common Stock as the Committee may deem appropriate. In granting any Non-Qualified Option, the Committee may specify that such Non-Qualified Option shall be subject to the restrictions set forth herein with respect to ISOs, or to such other termination, cancellation or other provisions as the Committee may determine. The Committee may from time to time confer authority and responsibility on one or more of its own members and/or one or more officers of the Company to execute and deliver such instruments. The proper officers of the Company are authorized and directed to take any and all action necessary or advisable from time to time to carry out the terms of such instruments.

13. Adjustments.

Upon the occurrence of any of the following events, an optionee's rights with respect to Options granted to the optionee hereunder shall be adjusted as hereinafter provided, unless otherwise specifically provided in the written agreement between the optionee and the Company relating to such Option:

(a) *Stock Dividends and Stock Splits.* If the shares of Common Stock subject to Options granted under this Plan shall be subdivided or combined into a greater or smaller number of shares or if the Company shall issue any shares of

Common Stock as a stock dividend on its outstanding Common Stock, the number of shares of Common Stock deliverable upon the exercise of Options shall be appropriately increased or decreased proportionately, and appropriate adjustments shall be made in the purchase price per share to reflect such subdivision, combination or stock dividend.

(b) *Acquisitions and Change in Control Events.* If the Company is to be subject to or engage in (x) a merger (or reverse merger), consolidation, or other similar event affecting the Company in which outstanding shares of Common Stock are exchanged for cash, securities, and/or other property of another entity, or (y) the sale or lease of all or substantially all of the Company's assets to another person or entity (any such event in such clauses (x) and (y) an "Acquisition"), the Committee or the Board shall (i) provide that the entity that survives the Acquisition or purchases or leases the Company's assets in the Acquisition or any affiliate of such entity (the "Surviving Entity") shall assume the Options granted pursuant to this Plan or substitute options to purchase securities of the Surviving Entity (or an affiliate thereof) on an equitable basis, (ii) upon written notice to the optionees, provide that all Options will become exercisable in full subject to the consummation of the Acquisition as of a specified time prior to the Acquisition and will terminate immediately prior to the consummation of such Acquisition or within a specified period of time after the Acquisition, and will not be exercisable after such termination, or (iii) in the event of an Acquisition under the terms of which holders of Common Stock will receive upon consummation thereof an amount of cash, securities and/or other property for each share of Common Stock surrendered pursuant to such Acquisition (the amount of cash plus the fair market value reasonably determined by the Committee of any securities and/or other property received by holders of Common Stock in exchange for each share of Common Stock shall be the "Acquisition Price"), provide that all outstanding Options shall terminate upon consummation of such Acquisition and that each optionee shall receive, in exchange for all vested shares of Common Stock under such Option on the date of the Acquisition, a payment in cash or in kind having a fair market value reasonably determined by the Committee or the board of directors of the Surviving Entity equal to the amount (if any) by which (A) the Acquisition Price multiplied by the number of such vested shares of Common Stock exceeds (B) the aggregate exercise price of such shares. If the Committee chooses under clause (iii) in the preceding sentence that all outstanding Options shall terminate upon consummation of an Acquisition and that each optionee shall receive a payment for the optionee's vested shares, with respect to any optionee whose stock option agreement specifies that no shares are vested until the first anniversary of the commencement of the optionee's employment, if the consummation of the Acquisition occurs prior to such first anniversary, then the number of vested shares under such Option shall be deemed to be equal to the product of (x) the number of shares of stock subject to the Option that otherwise would vest on the first anniversary and (y) the quotient obtained by dividing the number of days the optionee was employed by the Company, by 365. For purposes hereof, an Option shall be considered to be assumed or substituted "on an equitable basis" (without limiting other ways in which an Option may be assumed or substituted on an equitable basis hereunder) if, following consummation of the Acquisition, the assumed or substituted option confers the right to purchase, for each share of Common Stock subject to the Option immediately prior to the consummation of the Acquisition, the consideration received as a result of the Acquisition by the holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Acquisition (and if holders of Common Stock were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Acquisition Event is not solely common stock of the Surviving Entity (or an affiliate thereof), the Company may, with the consent of the Surviving Entity, provide for the consideration to be received upon the exercise of each share of Common Stock subject to the Option to consist solely of common stock of the Surviving Entity (or an affiliate thereof) having a fair market value as reasonably determined by the Committee or the board of directors of the Surviving Entity equal to the Acquisition Price.

If a Change in Control Event, as defined below, occurs that either (a) does not also constitute an Acquisition or (b) does constitute an Acquisition and clause (i) of the preceding paragraph is elected, and the optionee's employment with the Company, the Related Corporation or the Surviving Entity is terminated on or prior to the six month anniversary of the date of the consummation of such Change in Control Event either by the optionee for Good Reason, as defined below, or by the Company, the Related Corporation or the Surviving Entity for reason(s) other than Misconduct, as defined below, then all of the Options, or the equivalent to such Options in the form of assumed or substituted options granted in the Surviving Entity, that but for such termination and such Change in Control Event would vest on or prior to the next following annual anniversary of the Grant Date thereafter shall become immediately exercisable in full and any repurchase provisions applicable to Common Stock issued upon exercise thereof shall lapse, *provided*, however, that in particular stock option agreements issued pursuant to this Plan, the Board may provide that the Options or assumed or substituted options covered by such agreement shall become immediately exercisable upon the consummation of such Change in Control Event without regard to termination of employment, and that any repurchase provisions applicable to Common Stock issued upon exercise thereof shall lapse.

A "Change in Control Event" shall occur upon the occurrence of (i) an Acquisition after which holders of the Common Stock before the Acquisition do not beneficially own, directly or indirectly, at least 50% of the combined voting power of the then-outstanding securities of the Surviving Entity entitled to vote generally in the election of directors immediately after the consummation of the Acquisition, (ii) a single transaction or a series of transactions pursuant to which any person (within the meaning of Section 13(d) or Section 14(d)(2) of the Securities Exchange Act of 1934), excluding any employee benefit plan sponsored by the Company and any affiliates of the Company prior to such transaction or transactions, acquires the beneficial ownership, directly or indirectly, of at least 50% of the combined voting power of the then-outstanding securities of the Company or the Surviving Entity, as the case may be, entitled to vote generally in the election of directors immediately after the consummation of the transaction or transactions, except that any acquisitions of securities directly from the Company shall be disregarded for purposes of this clause (ii), or (iii) the liquidation or dissolution of the Company.

If, in connection with a Change in Control Event, a tax under Section 4999 of the Code would be imposed on the grantee of any Stock Right (after taking into account the exceptions set forth in Sections 280G(b)(4) and 280G(b)(5) of the Code), and the grantee, on an after-tax basis (taking into account such tax) would receive greater net compensation by not having any or all of such Stock Rights accelerate, then at the discretion of the Committee, the number of Stock Rights of any such grantee which shall become immediately exercisable, realizable or vested as provided in this Section 13 (or such provision of any other agreement or instrument governing such Stock Right that provides for such an acceleration in connection with a Change in Control Event) may be reduced (or delayed), to the extent necessary to maximize such net compensation. For purposes of determining "net compensation" under this paragraph, the amount of compensation considered to be realized by the grantee of any Stock Right as a result of the acceleration of the vesting of such Stock Right shall be determined in accordance with the principles set forth in the proposed Treasury Regulations under Section 280G of the Code (or any final or temporary Treasury Regulations replacing such proposed Treasury Regulations) for determining the amount of any "parachute payment" resulting from the acceleration of vesting of restricted stock, a stock option or any other unvested stock right.

"Misconduct" shall mean any one or more of the following: (a) the commission of an act of embezzlement, fraud, dishonesty or deliberate disregard of the rules or policies of the Company or any Related Corporation which results in material loss, damage or injury to the Company or any Related Corporation, whether directly or indirectly; (b) the unauthorized disclosure of any trade secret or confidential information of the Company or any Related Corporation; (c) the breach by the optionee of any agreement with the Company or any Related Corporation, including without limitation any noncompetition agreement between the optionee and the Company or any Related Corporation; or (d) the willful failure by the optionee to perform his or her material responsibilities to the Company or any Related Corporation.

"Good Reason" shall mean (i) any material diminution in the optionee's title, authority, or responsibilities from and after such Acquisition or Change in Control Event, as the case may be, (ii) any reduction in the annual cash compensation payable to the optionee from and after such Acquisition or Change in Control Event, as the case may be or (iii) a change of more than 100 miles in the optionee's permanent workplace without the optionee's consent.

(c) *Recapitalization or Reorganization.* If a recapitalization or reorganization of the Company (other than a transaction described in subparagraph (b) above) occurs, pursuant to which securities of the Company or another entity are issued with respect to the outstanding shares of Common Stock, an optionee, upon exercising an Option, shall be entitled to receive for the purchase price paid upon such exercise the securities he or she would have received if he or she had exercised his or her Option prior to such recapitalization or reorganization and had been the owner of the Common Stock receivable upon such exercise at such time.

(d) *Modification of ISOs.* Notwithstanding the foregoing, any adjustments made pursuant to the foregoing subparagraphs (a), (b) or (c) with respect to ISOs shall be made only after the Committee, after consulting with counsel for the Company, determines whether such adjustments would constitute a "modification" of such ISOs (as that term is defined in Section 424 of the Code or any successor thereto) or would cause any adverse tax consequences for the holders of such ISOs. If the Committee determines that such adjustments made with respect to ISOs would constitute a modification of such ISOs, it may refrain from making such adjustments.

(e) *Issuances of Securities and Non-Stock Dividends.* Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, of the Company shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares subject to Options. No adjustments shall be made for dividends paid in cash or in property other than securities of the Company (and, in the case of securities of the Company, such adjustments shall be made pursuant to the foregoing subparagraph (a)).

(f) *Fractional Shares.* No fractional shares shall be issued under this Plan, and the optionee shall receive from the Company cash in lieu of such fractional shares.

(g) *Adjustments.* Upon the happening of any of the foregoing events described in subparagraphs (a), (b) or (c) above, the class and aggregate number of shares set forth in paragraph 4 hereof that are subject to Stock Rights which previously have been or subsequently may be granted under this Plan shall also be appropriately adjusted to reflect the events described in such subparagraphs. The Committee or the board of directors of the Surviving Entity (the "Successor Board"), as applicable, shall determine the specific adjustments to be made under this paragraph 13 and its determination shall be conclusive.

If any person or entity owning Common Stock obtained by exercise of a Stock Right made hereunder receives shares or securities or cash in connection with a corporate transaction described in subparagraphs (a), (b) or (c) above as a result of owning such Common Stock, except as otherwise provided in subparagraph (b), such shares or securities or cash shall be subject to all of the conditions and restrictions applicable to the Common Stock with respect to which such shares or securities or cash were issued, unless otherwise determined by the Committee or the Successor Board.

14. Means of Exercising Options.

An Option (or any part or installment thereof) shall be exercised by giving written notice to the Company at its principal office address. Such notice shall identify the Option being exercised and specify the number of shares as to which such Option is being exercised, accompanied by full payment of the purchase price therefor either (a) in United States dollars in cash or by check, or (b) at the discretion of the Committee, by delivery of an irrevocable and unconditional undertaking, satisfactory in form and substance to the Company, by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price, or delivery to the Company of a copy of irrevocable and unconditional instructions, satisfactory in form and substance to the Company, to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price, or (c) at the discretion of the Committee, by delivery of the grantee's personal recourse note bearing interest payable not less than annually at no less than 100% of the applicable Federal rate, as defined in Section 1274(d) of the Code, or (d) at the discretion of the Committee, by any combination of (a), (b) and (c) above. The holder of an Option shall not have the rights of a shareholder with respect to the shares covered by his or her Option until the date of issuance of a stock certificate to the optionee for the shares subject to the Option. Except as expressly provided above in paragraph 13 with respect to changes in capitalization and stock dividends, no adjustment shall be made for dividends or similar rights for which the record date is before the date such stock certificate is issued.

15. Term and Amendment of Plan.

This Plan shall expire on September 30, 2015 (except as to Options outstanding on that date). Subject to the provisions of paragraph 5 above, Options may be granted under this Plan prior to the date of stockholder approval of this Plan. The Board may terminate or amend this Plan in any respect at any time, except that (a) the total number of shares that may be issued under this Plan may not be increased without stockholder approval (except by adjustment pursuant to paragraph 13); (b) the provisions of paragraph 3 regarding eligibility for grants of ISOs may not be modified; (c) the provisions of paragraph 6(b) regarding the exercise price at which shares may be offered pursuant to ISOs may not be modified (except by adjustment pursuant to paragraph 13); and (d) the expiration date of this Plan may not be extended without the approval of the stockholders obtained within 12 months before or after the Board adopts a resolution authorizing any of the foregoing actions.

16. Section 162(m).

Notwithstanding anything in this Plan to the contrary, no Stock Right shall become exercisable, vested or realizable if such Stock Right is granted to an employee that is a "covered employee" as defined in Section 162(m) of the Code and the Committee has determined that such Stock Right should be structured so that it is not "applicable employee remuneration" under such Section 162(m) unless and until the terms of this Plan, including any amendment hereto, have been approved by the Company's stockholders in the manner and to the extent required under such Section 162(m).

17. Amendment of Stock Rights.

The Board or Committee may amend, modify or terminate any outstanding Stock Rights including, but not limited to, substituting therefor another Stock Right of the same or a different type, changing the date of exercise or realization, and converting an ISO to a Non-Qualified Option, provided, that, except as otherwise provided in paragraphs 9 or 10, the grantee's consent to such action shall be required unless the Board or Committee determines that the action, taking into account any related action, would not materially and adversely affect the grantee.

18. Application of Funds.

The proceeds received by the Company from the sale of shares pursuant to Stock Rights issued or granted under this Plan shall be used for general corporate purposes.

19. Governmental Regulation.

The Company's obligation to sell and deliver shares of the Common Stock under this Plan is subject to the approval of any governmental authority required in connection with the authorization, issuance or sale of such shares.

20. Withholding of Additional Income Taxes.

Upon the exercise of a Non-Qualified Option, the making of a Restricted Purchase of Common Stock for less than its fair market value, the granting of an Award, the making of a Disqualifying Disposition (as defined in paragraph 21) or the vesting of restricted Common Stock acquired on the exercise of a Stock Right hereunder, the Company, in accordance with Section 3402(a) of the Code, may require the optionee or purchaser to pay additional withholding taxes in respect of the amount that is considered compensation includible in such person's gross income. The Committee in its discretion may condition (i) the exercise of an Option, (ii) the making of a Restricted Stock Purchase of Common Stock for less than its fair market value, or (iii) the granting of an award, or (iv) the vesting of restricted Common Stock acquired by exercising a Stock Right, on the grantee's payment of such additional withholding taxes.

21. Notice to Company of Disqualifying Disposition.

Each employee who receives an ISO must agree to notify the Company in writing immediately after the employee makes a Disqualifying Disposition of any Common Stock acquired pursuant to the exercise of an ISO. A "Disqualifying Disposition" is any disposition (including any sale) of such Common Stock before the later of

(a) two years after the date the employee was granted the ISO, or

(b) one year after the date the employee acquired Common Stock by exercising the ISO. If the employee has died before such stock is sold, these holding period requirements do not apply and no Disqualifying Disposition can occur thereafter.

22. Governing Law; Construction.

The validity and construction of this Plan and the instruments evidencing Stock Rights shall be governed by the laws of the State of Delaware.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Post-Effective Amendment No. 1 to the Registration Statements (No 333-187928 and No. 333-218244) on Form S-8 of Tecogen Inc. of our report dated March 12, 2020, relating to the consolidated financial statements of Tecogen Inc., appearing in the Annual Report on Form 10-K of Tecogen Inc. for the year ended December 31, 2019.

We also consent to the reference to our firm under the heading “Experts” in such Prospectus.

/s/ Wolf & Company, P.C.

Boston, Massachusetts

July 28, 2020