



DIVISION OF
CORPORATION FINANCE

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

January 18, 2012

Via E-mail

John N. Hatsopoulos
Chief Executive Officer
Tecogen Inc.
45 First Avenue
Waltham, MA 02451

**Re: Tecogen Inc.
Registration Statement on Form S-1
Filed December 22, 2011
File No. 333-178697**

Dear Mr. Hatsopoulos:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Registration Statement on Form S-1

General

1. We note that you are proposing to register the resale of up to 35,381,768 shares of your common stock on behalf of certain selling stockholders listed in the registration statement. Given the size of this offering relative to the number of outstanding shares held by non-affiliates, as well as the nature of the selling stockholders, we believe this transaction might be a primary offering. Please provide us with your analysis as to why this offering is a secondary offering under Rule 415(a)(1)(i) and not an indirect primary offering for which the selling stockholders should be identified as underwriters. In your analysis, you may wish to address the following factors: how long the selling stockholders have held the securities, the circumstances under which they received them, their relationship to the registrant, the amount of securities involved, whether they are in the business of underwriting securities, and finally, whether under all the circumstances it

appears that they are acting as a conduit for the company. Please refer to Question 612.09 of the Division's Compliance & Disclosure Interpretations for Securities Act Rules.

Prospectus Cover Page

2. We note your statement that the selling stockholders do not include any of your directors, officers or 10% holders and the prospectus may not be used by any such person or entity. Given that John N. Hatsopoulos and George N. Hatsopoulos are selling stockholders, please delete this statement.

Table of Contents

3. Please remove the last sentence of the third paragraph on the prospectus cover page and the last two sentences of the first paragraph under the table of contents. These statements may suggest to investors that you are not responsible for omissions of material facts necessary to make your statements not misleading at the time of sale or contract of sale. Information that is conveyed after the time of sale or contract of sale is not taken into account for purposes of section 12(a)(2) or 17(a)(2) of the Securities Act. See Securities Act Rule 159.

Prospectus Summary, page 1

4. Please ensure that your summary is balanced. Please disclose up front that you have incurred operating losses for your prior fiscal years, including quantifying the number of years that you have had such losses, and that you expect you will continue to incur such losses.
5. We note certain statements regarding the benefits of your CHP products, including that such products decrease greenhouse gas emissions and that you have a proven track record of reliability in commercial CHP systems. Please provide additional disclosure supporting such statements, including how your products reduce greenhouse gas emissions (or, if, alternatively, these systems have lower emissions than other competing products) and examples of your proven track record.
6. We note your disclosure on page 10 that your internal controls over financial reporting were not effective as of September 30, 2011. Please prominently disclose this in your Summary section.
7. We note your disclosure on page 59 that John N. Hatsopoulos, your CEO, spends only approximately 20% of his business time on the affairs of the company. Please disclose this fact in your Summary section.

8. We note that you conduct a notable amount of business and other transactions with certain “affiliated companies,” and that a number of members of management and the Board also have positions with such affiliated companies. Please provide an overview of your relationship with such affiliated companies in your Summary section.

Risk Factors, page 4

General

9. We note in the introductory paragraph to your risk factors section you state that there may be risks that you do not consider material now but may become material, or there may be risks that you have not yet identified. You must disclose all risks that you believe are material at this time. Delete this language from your introductory paragraph.
10. We note that many of your risk factors are currently written as if you are an early stage company without any significant operating history. For example, we note that you state that you may not be successful in executing your business plan, that you *expect* competition for your products and services, and that businesses and consumers might not adopt cogeneration solutions as a means for obtaining their power needs. These are just examples. However, we note that your company has actually been operating since the early 1960’s, and some members of management have been with the company since the sale of Tecogen in 2000, or prior thereto. Please comprehensively revise your risk factors to ensure that each of them reflects the current state of your business and explains the specific risk as applied to the specific facts and circumstances of your company.
11. In general, risk factors that describe circumstances that could apply equally to other businesses that are similarly situated are generic risks that should not be included in your risk factor section. For example, we note that the following risk factors appear to contain generic disclosure:
 - Our success is dependent upon attracting and retaining highly qualified personnel . . .,(page 6);
 - We may make acquisitions that could harm our financial performance, (page 9);
 - Our ability to access capital for the repayment of debts . . ., (page 9);
 - Our quarterly operating results are subject to fluctuations . . ., (page 9); and

These are just examples. Please either eliminate these generic risks, or revise them to state the specific material risks that apply to you or to the purchasers in this offering.

12. We note that your risk factors often cite a specific risk without providing any examples of how that risk has specifically impacted your business so that investors may have a better

understanding of how this risk could impact your future operations and financial condition. We note the following examples:

- The execution of our growth strategy is dependent upon the continued availability of third-party financing . . . , page 4;
- We are dependent on third-party suppliers . . . , page 5;
- Business and consumers might not adopt cogeneration solutions as a means for obtaining their electricity and power needs, page 6;
- We operate in a highly regulated business environment . . . , page 7;
- Utility companies or governmental entities could place barriers to our entry into the marketplace . . . , page 7;
- Commodity market factors impact our costs . . . , page 8;
- Our products involve a lengthy sales cycle and we may not anticipate sales levels appropriately . . . , page 8;
- The economic viability of our projects depends on the price spread between fuel and electricity . . . , page 8; and
- We are exposed to credit risks with respect to some of our customers (page 9).

These are just examples. Please revise accordingly.

We may be unable to fund our future operating requirements . . . , page 4

13. Please revise this risk factor to address whether your current funds are sufficient to fund your operating requirements.

We are controlled by a small group of majority stockholders...., page 10

14. Please reconcile this risk factor with the fact that George and John Hatsopoulos are seeking to sell 100% of their holdings and include a risk factor addressing the potential risks related to these individuals having little or no continuing stake in the company.

Selling Security Holders, page 14

15. Please disclose how the selling security holders acquired the securities they may offer and sell pursuant to the registration statement, including the dates of the transactions, the number of shares purchased in each transaction, and the purchase price, if any.

Legal Matters, page 21

16. We note that the disclosure under the heading "Legal Matters" relates to legal proceedings. It is unclear why this disclosure has been included in this section. Please revise to advise who will opine on the validity of the common stock offered pursuant to the registration statement.

Business, page 22

General

17. We note your disclosure that the company was formed in the early 1960s, and was then sold to private investors in 2000. However, your disclosure throughout the business section and the prospectus does not, at times, seem consistent with a company that has been in operation for an extended period of time. Please revise your disclosure to provide investors with a better understanding of the general development of your business, including, for example, how long you have sold your current products and whether there have been any significant changes in the focus of your business since its establishment in the 1960s. Please also disclose whether your company was known as Tecogen prior to 2000, or was instead a part of Thermo Electron at that time. Please make any corresponding changes to the Summary section as well.
18. We note that your disclosure includes various qualitative and comparative statements and that for certain of these statements, you have provided footnotes citing the sources of such information. Please delete these footnotes and instead indicate in the text of your disclosure both the name and date of the source for the various statements. Finally, please tell us whether you commissioned the report or any part thereof and, if so, please either file consents or explain to us why you are not required to do so under Rule 436 of Regulation C and Section 7 of the Securities Act. To expedite our review, please provide us with copies of each source, clearly marked to highlight the portion or section that contains this information and cross-reference it to the appropriate location in your filing.
19. Please disclose whether you are attempting to incorporate the information on external web sites into this prospectus. Please see our Use of Electronic Media, Interpretive Release No. 33-7856 (Apr. 28, 2000) for further guidance regarding the use of hyperlinks in your prospectus.
20. We note that you provide data relating to the efficiency of the electricity industry and the prospective CHP market in various sectors, including an estimate of market potential, but this data is from 2000 and 2004. If you wish to provide this sort of data to investors, please ensure that it takes into account more recent developments. The disclosure should not include data that has since changed or is no longer accurate given developments in the industry in the past decade. Please revise accordingly.

21. We note your use of industry and product specific jargon throughout this section. For example, you use the terms “UL-certified,” “inverter,” “conventional induction generators,” and “permanent-magnet generator.” Please revise to provide context for these terms so an investor not familiar with your industry can understand such terms.
22. Please revise your disclosure to include the following:
- The sources and availability of raw materials, and the names of principal suppliers; and
 - An estimate of the amount spent during each of the last two fiscal years on research and development activities, and if applicable, the extent to which the cost of such activities is borne directly by customers.

See Item 101(h)(4) of Regulation S-K.

23. Please include a discussion of your dependence on one or a few major customers. We note in particular the disclosure in Note 13 to the financials on page F-36 that you receive a significant portion of your revenues from sales to American DG Energy Inc. See Item 101(h)(4)(vi) of Regulation S-K.

Industry Background, page 23

24. Please provide illustrative support and context for certain of the statements that you make in this section. For example, please provide additional disclosure as to how many large industrial plants have adopted CHP technology, and what you mean by “large” when referring to such plants. This is only an example.
25. We note the list of reasons why CHP acceptance in the commercial sector is increasing. Please explain why these reasons increase CHP acceptance. For example, you state that CHP systems reduce pollutants more “easily, cheaply and quickly” but it is unclear what other systems you are comparing the CHP systems to in making such a comparison. Please also clarify who you are referring to in your statement regarding the pressure to cut “their” operating costs. Further, it appears that this disclosure should appear under “Tecogen’s solution” as opposed to “Industry Background.”
26. We note your reference throughout this section to “grid congestion” and to “rigorous air quality rules.” Please provide a brief overview of the specifics of the air quality rules and grid congestion in the Industry Background section.

Our Products and Services, page 24

27. Please revise your disclosure to explain the markets for each of your products and, to the extent material to an understanding of your business, please disclose the contribution to

your revenues made by each of these products. Please also provide context so that an investor may understand the extent of time that you have sold each of these products and the effect of each of these products on your overall financial condition.

28. Please revise your disclosure to describe the distribution methods of your products. See Item 101(h)(4)(ii) of Regulation S-K.
29. We note your statement that you have “recently” developed an advanced technology for controlling engine emissions in conjunction with the California Energy Commission and the Southern California Gas Company. Please disclose what you mean by recently. Please also advise whether, other than with regard to the sale of units to the Sacramento Municipal Utility District in California in mid-2011, you have entered into any agreements relating to the Ultra emission control product, including its sale or development. Please also file any such agreements as exhibits to the registration statement. See Item 601(b)(10) of Regulation S-K.
30. We note that the engine used in your cogeneration modules and chillers is supplied by General Motors. Please disclose whether you purchase such motors pursuant to a supply agreement with General Motors, or otherwise. Please also file any such supply agreement or similar agreement as an exhibit to the registration statement. See Item 601(b)(10) of Regulation S-K.
31. We note your disclosure on page 25 that your cogeneration products offer many compelling advantages, such as lower cost, better quality control, higher reliability, etc. Please revise your disclosure to specify those products that you are using in comparison. For example, your products have a lower cost than what other products?

Alliances and Partnerships, page 27

32. We note your list of various partners on page 27. Please disclose the date when each partnership was in effect, and please clearly disclose whether any of these are current partnerships. Please also discuss the significance and nature of each of these partnerships. Further, please file any agreements that you have entered into with any of these partners, to the extent material, as an exhibit to the registration statement. See Item 601(b)(10) of Regulation S-K.
33. Please file a copy of your exclusive licensing agreement with the Wisconsin Alumni Research Foundation as an exhibit to the registration statement. See Item 601(b)(10) of Regulation S-K.

Competition, page 28

34. We note your statement that your products compete with other systems based on a “reciprocating engine.” Please explain what a reciprocating engine is in your disclosure.

35. Please clearly disclose in this section your competitive position in the market and the methods of competition. Please do not include a general discussion of the competition in the industry unless you believe that the specific disclosure relates to your competitive position. For example, we note your list of companies that manufacture reciprocating engines. However, given that these companies are viewed as suppliers more than competitors, please delete this disclosure. Further, we note that you list several companies that operate in the alternative energy market, but that the products of these companies are not directly competing with your products. Please revise your disclosure accordingly.
36. We note your disclosure that your cogeneration unit sales are subject to “intense direct competition from companies that sell products” that are similar to your products. Given that cogeneration units are your main product, please expand this discussion to disclose your competitive position relating to such units, and the related methods of competition.
37. We note your reference to the “current low volume of [y]our manufacturing operation” on page 29. Please disclose in the appropriate section of your Business section how your current manufacturing volume compares to your historical manufacturing volume.

Certain Related Party Contracts, page 29

38. Please clarify exactly what it means that American DG Energy has exclusive sales representation rights to the Tecogen cogeneration products in New England. Does this mean that American DG Energy is the only company that is permitted to sell such products in New England, aside from you, or does this mean that you are also prohibited from selling your cogeneration products in this region? Please also disclose the significance of the grant by American DG Energy of sales representation rights to the On-Site Utility energy service in California.
39. Please file the distribution agreement between Ilios and American DG Energy as an exhibit to the registration statement, or, alternatively, tell us why you are not required to do so. See Item 601(b)(10) of Regulation S-K.

The Company and its Affiliates, page 29

40. Please revise your disclosure to include the identity of the common stockholders, and to disclose the positions that John N. Hatsopoulos and George N. Hatsopoulos hold in Tecogen and in each affiliated company. Please also disclose the business of each of the affiliated companies.
41. We note your statement that both American DG Energy and EuroSite Power purchase energy equipment from various suppliers. Please explain the significance of this statement, including whether, and to what extent, these companies purchase energy equipment from you.

Government Regulations, page 30

42. Please revise your disclosure to discuss the effect of both existing and probable government regulation on your business. We note your statement that there do not appear to be any *new* government regulation that will materially affect the company, but you must also address the effect of existing government regulations. For example, we note your statement regarding certain “air quality rules” throughout your Business section. See Item 101(h)(4)(ix) of Regulation S-K.

Employees, page 30

43. Please update your disclosure to provide the status of your negotiation with the labor union in New Jersey and New York.

Properties, page 30

44. Please file the lease for your headquarters in Waltham, Massachusetts as an exhibit to the registration statement.

Market for Common Equity and Related Stockholder Matters, page 31

Rule 144, page 31

45. Please revise your discussion to accurately describe the operation of Rule 144 under the Securities Act for the resale of restricted or control securities. For example, you state that a person who has beneficially owned shares of your common stock for at least one year would be entitled to sell a certain amount of shares within any three-month period. Please note that these volume limitations only apply to affiliates. Please also take note of the 2007 amendments to Rule 144, which shortened certain holding periods to six months, in addition to other significant changes to Rule 144. Please also revise your disclosure to state the amount of your common stock that could be sold pursuant to Rule 144. See Item 201(a)(2)(ii) of Regulation S-K.
46. We note your disclosure that under the unlimited resale provisions of Rule 144 no shares of your Common Stock are eligible for resale. Please advise us as to why you believe this is the case.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 34

47. Commensurate with Commission guidance regarding Management’s Discussion and Analysis, please expand your MD&A “Overview” section to provide context for the remainder of the MD&A discussion. Identify the factors that management focuses on in evaluating the financial condition and operating performance of your business. Please

focus the general emphasis of the overview on the discussion and analysis of known trends, demands, commitments, events and uncertainties, and specific guidance on disclosures about liquidity, capital resources and critical accounting estimates. Please avoid simply repeating information that is included elsewhere in the prospectus. See Item 303 of Regulation S-K and SEC Release 33-8350.

Results of Operations, page 39

Nine Months Ended September 30, 2011 Compared to Nine Months Ended September 30, 2010, page 39

Revenues, page 39

48. You indicate that the decrease in total revenue was due to a “decrease in product sales in the first quarter of 2011 and due to orders not being booked.” Please expand your disclosure to clarify why there was a decrease in product sales and why orders were not being booked.
49. You indicate that shipments of chiller modules during 2011 accounted for 49.2% of product revenues and that for the same period in 2010 chiller modules accounted for 12.1% of product revenues. Please expand your disclosures to address this apparent material change in your product mix. Your revised disclosures should address changes in revenues related to cogeneration devices.
50. You indicate that your strategy of focusing on the installation business has “worked well in the past as many of the company’s installed sites became [y]our best performing sites.” Please clarify what you mean by this.

Cost of Sales, page 39

51. You indicate that the higher gross margins attributable to the sale of more chillers that carry a higher margin was offset by an increase in additional payroll costs incurred by Ilios as the company ramped up research and development of its new product. Please quantify these additional payroll costs.
52. Address how the additional services revenues recognized during the period impacted your cost of goods sold as a percentage of revenues. In this regard we note your disclosure under the Operating Expenses caption that the increase in these expenses was due to the addition of personnel to support the growth of the service and installation operations. Please address the need to classify these personnel costs within cost of sales.
53. Please expand your discussion of contract research and development income to also include the total amount of research and development expenses recognized in each period. This will allow readers to determine whether changes in contract research and

development income recognized resulted in an actual change in cost of goods sold from period to period or if it was merely a dollar for dollar offset of the related expenses recognized.

Year Ended December 31, 2010 Compared to Year Ended December 31, 2009, page 40

Revenues, page 40

54. You indicate that the 3.9% decrease in revenues was due to an overall decrease in product sales. Please expand your disclosures to clarify the underlying reasons for this decrease.
55. Clarify whether InVerde modules are cogeneration devices or chiller modules and why they represented 73.4% of product revenues in 2010 as compared to only 32.7% of product revenues in 2009. Please also identify the other material products sold and the reasons for changes in their related revenues period to period.

Cost of Sales, page 40

56. You indicate that your gross margin remained flat between the two periods because your product sales mix was similar from year to year. This statement seems to be contrary to your discussion of product revenues for the same period which indicates significant changes in sales of InVerde modules. Please revise accordingly.

Operating Expenses, page 40

57. We note your statement that your operating expenses decreased in 2010 as compared to 2009 due to a larger percentage of product sales being sold without commission. Please revise your Business section, and elsewhere as appropriate, to discuss your arrangements relating to sales commissions, including who is eligible for sales commissions, on which products you pay such commissions, whether these commissions are paid to your own employees or otherwise, and whether you currently pay such sales commissions.

Liquidity and Capital Resources, page 41

Seasonality, page 41

58. Given your substantial operating history, please revise your disclosure to state whether there is any seasonality relating to your product sales, as opposed to whether you *expect* that certain products will be sold during certain times of the year.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure, page 42

59. We note that you changed accountants after your 2009 fiscal year. Please revise your filing to provide all of the disclosures required by Item 304 of Regulation S-K.

Inflation, page 42

60. Please discuss the impact of inflation and changing prices on your net sales and revenues and on income from continuing operations for the two most recent fiscal years. We note that your current disclosure only states what you *expect* will be the impact of inflation. See Item 303(a)(3)(iv) of Regulation S-K.

Quantitative and Qualitative Disclosures About Market Risk, page 42

61. Because, as a smaller reporting company, you are not required to provide the disclosure required by Item 305 of Regulation S-K, it is unclear why you have provided disclosure that your exposure to market risk has not changed materially from your exposure at December 31, 2010. Please revise and advise.

Management and Governance, page 43

62. We note your disclosure on page 59 that your CEO spends only approximately 20% of his business time on affairs of the company. Please provide similar disclosure in this section.
63. Please revise the description of the business experience for each director and executive officer so that it covers their principal occupations and employment during the past five years. For example, the information for Charles T. Maxwell does not provide the dates of his employment. Please provide all information required by Item 401(e) of Regulation S-K.
64. Please clarify whether Anthony S. Loumidis is currently the CFO of the company's affiliated entities, or whether he previously served in these positions. Please also disclose the dates that he served as CFO of such affiliated entities.

Board Committees, page 46

65. We note that you have filed the charters for each of your committees as Exhibits 10.1, 10.2, and 10.3 to the registration statement. Please note that exhibits in this series are reserved for material contracts. Please re-file these exhibits under the 99 series as additional exhibits. See Item 601 of Regulation S-K.

Director Compensation, page 47

66. We note your disclosure that each of your directors will receive a fee of \$500 per day for service on the Board and on each of the committees. Please clarify whether each director receives this fee for each day of the year that he serves on the Board or committee, or only on those days that the Board or committee holds meetings or otherwise conducts business. Please also clarify why your non-employee directors did not receive any cash compensation for serving as directors in 2010 or in 2011.

Executive Officer and Director Compensation, page 48

67. Please update your disclosure throughout this section to provide information for December 31, 2011, which is your last completed fiscal year. See Item 402(m) – Item 402(r) of Regulation S-K.

Summary Compensation Table, page 48

68. It does not appear that you have disclosed the aggregate grant date fair value, as computed in accordance with FASB ASC Topic 718, for the option awards. Please revise your disclosure accordingly and provide similar information in your disclosure for December 31, 2011. See Item 402(n)(2)(v-vi) of Regulation S-K.

Outstanding Equity Awards at Fiscal-Year End, page 50

69. We note that you have providing an Outstanding Equity Awards at Fiscal Year-End Table for the outstanding equity awards held by each of your directors. Please revise to provide the Director Compensation Table that is required by Item 402(r) of Regulation S-K.

Compensation Committee Interlocks and Insider Participation, page 53

70. Please advise how the service of John N. Hatsopoulos as the director and CEO of American DG Energy is considered a compensation committee interlock. For example, does Mr. Hatsopoulos serve as a member of the compensation committee of American DG Energy? See Item 407(e)(4)(iii) of Regulation S-K.

Certain Relationships and Related Party Transactions, page 58

71. You provide multiple descriptions of the positions that John N. Hatsopoulos and George N. Hatsopoulos hold in the company, American DG Energy, EuroSite Power, GlenRose Instruments, and Ilios, but each description does not contain a complete list of the positions held by these individuals. Please provide one complete, concise description listing each of the positions held by these individuals.

72. Please disclose each related person who had or will have a direct or indirect material interest in any of your transactions with your affiliated companies. We note that your disclosure currently includes only John N. Hatsopoulos and George N. Hatsopoulos, but that certain other officers and directors also hold positions at your affiliated companies and therefore may be considered to have a material direct or indirect material interest in the subject transactions. For example, we note that Anthony Loumidis, your Vice President and Treasurer, is also the CFO of American DG Energy, GlenRose Instruments, and EuroSite Power. Please revise accordingly.
73. Please provide a complete description of each related party transaction, including all of the information required by Item 404(a) of Regulation S-K, including all information that is material to investors in light of the circumstances of the particular transaction. For example, we note that your disclosure merely states that American DG Energy has sales representation rights to the company's products and services in New England, but does not discuss any details relating to the contract, such as the date of the contract or the dollar value of the contract. Please also provide all required disclosure for the Facilities and Support Services Agreement with American DG Energy.
74. With respect to the disclosure relating to the convertible debentures and the demand note, please provide all of the information required by item 404(a)(5) of Regulation S-K, including the largest aggregate amount of principal outstanding, the amount outstanding as of the latest practicable date, the amount of principal paid during the period for which disclosure is provided, the amount of interest paid during such period, and the rate or amount of interest payable on the indebtedness. Further, please identify the specific related party as opposed to referring to such related party as "the holder" as you do in certain sections of the disclosure.
75. We note that you include certain related party transactions in Note 13 to the financial statements that you do not include in your disclosure in this section. For example, we note that you receive revenue from the sales of cogeneration and chiller systems, parts and services to American DG Energy Inc., and that you also pay certain operating expenses, including benefits and insurance, on behalf of American DG Energy Inc. for which you are reimbursed. Please provide all information required by Item 404(a) of Regulation S-K for such transactions, including the amount of revenue from such sales and any amounts due from American DG Energy.
76. Please file all agreements relating to the transactions disclosed in this section as exhibits to the registration statement. See Item 601(b)(10)(ii)(A) of Regulation S-K.

Condensed Consolidated Statements of Cash Flows, page F-5

77. You indicate that your statement of cash flows begins with Net loss. However, the \$786,111 loss you present is actually Net loss attributable to Tecogen, Inc. Please revise your statement of cash flows to begin with consolidated net loss as required by ASC

Topic 230-10-45. Please address this comment in your annual financial statements as well.

Report of Independent Registered Accounting Firm, page F-19

78. We note your disclosure on page 21 which indicates that the consolidated financial statements of and for the period ended December 31, 2009 were audited by Caturano and Company, Inc. Please include their audit report.

Consolidated Statements of Shareholders' Equity, page F-22

79. We note as disclosed on pages F-24 and F-31 that in May 2009 you invested \$8,400 in exchange for 8,400,000 shares of a newly established corporation Ilios you created to develop and distribute a line of ultrahigh-efficiency heating products, including a high efficiency water heater and that such investment gave you controlling financial interest in Ilios. We further note that in May 2009 you sold 1,400,000 shares of Ilios for the extinguishment of \$700,000 in demand notes payable, convertible debentures and accrued interest. Finally, we note that in July 2009 Ilios raised \$1,400,000 in a private placement. We have the following comments on these transactions.

- Please address why it was appropriate to recognize the difference between the Company's purchase price of the Ilios shares and the amount of debt forgiveness as additional paid-in capital. We note that the Company recently created Ilios and the amount invested by the Company may not represent the fair value of Ilios. In this regard, please clarify what assets and/or operations, if any, of the Company were transferred to Ilios.
- Please disclose the number of shares issued by Ilios in its July 2009 private placement and based on the number of shares issued how you determined that the Company owned 63% interest in Ilios as of December 31, 2010 and 2009.
- Please tell us how you calculated the \$117,161 and \$208,673 net loss attributable to noncontrolling interest. In this regard, the \$208,673 appears to be 37% of your consolidated net loss for 2010.
- With reference to the appropriate authoritative literature, please tell us how you determined the amount of net proceeds to be allocated to additional paid-in capital of Tecogen Inc. and noncontrolling interests. Please tell us the carrying amount of Ilios' equity prior to the private placement.

80. Please provide the additional disclosures required by ASC 810-10-55-4M.

Notes to Audited Consolidated Financial Statements, page F-24

81. Please include the product line disclosures required by ASC Topic 280-10-50-40.

Recent Sales of Unregistered Securities, page II-3

82. Please revise the disclosure in this section to include all of the information required by Item 701 of Regulation S-K for each transaction, including, but not limited to, the name(s) of the purchasers, the date of the sale, the title and amount of securities sold, the aggregate offering price and any underwriting discounts or commissions, where applicable, and the aggregate amount of consideration received by you. We note in particular that you often identify the purchasers simply as “accredited investors.” Please name such accredited investors.

Undertakings, page II-5

83. Please include the undertaking in Item 512(a)(1)(iii) of Regulation S-K.

84. We note that you have included the undertaking in Item 512(a)(6) of Regulation S-K, which is applicable only to primary offerings. Please delete this undertaking.

Exhibit Index

85. We note that you have not yet filed the legal opinion. Please be advised that we will review your legal opinion and all other remaining exhibits before the registration statement is declared effective, and we may have additional comments.

86. We note that you have incorporated Exhibit 10.6, the Facilities, Support Services and Business Agreement between American DG Energy Inc. and Tecogen Inc., by reference to the Form 10-SB/A filed by American DG Energy Inc. Please note that you must submit your own request for confidential treatment for such exhibit. To the extent that we have comments on your request, we will issue them in a separate letter. Please further note that all comments on your request must be resolved before we will entertain a request to accelerate the effective date of your registration statement.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

John N. Hatsopoulos
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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Mindy Hooker, Staff Accountant, at 202-551-3732, or Jeanne Baker, Staff Accountant, at 202-551-3691 if you have questions regarding comments on the financial statements and related matters. Please contact Erin Jaskot, Staff Attorney, at 202-551-3442, or Craig Slivka, Special Counsel, at 202-551-3729 with any other questions.

Sincerely,

/s/ Craig E. Slivka, for

Pamela A. Long
Assistant Director

cc: Kristen A. Young, Esq. (*via E-mail*)
Sullivan & Worcester LLP