



DIVISION OF
CORPORATION FINANCE

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

May24, 2012

Via E-mail

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

**Re: Tecogen Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed April 27, 2012
File No. 333-178697**

Dear Mr. Hatsopoulos:

We have reviewed your response letter and the above-referenced filing, and have the following comments.

Amendment No. 1 to Registration Statement on Form S-1

General

1. Please revise your document to include updated financial statements in accordance with Rule 8-08 of Regulation S-X.
2. Since you appear to qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act (“the Act”), please disclose on your prospectus cover page that you are an emerging growth company, and revise your prospectus to provide the following additional disclosures:
 - Describe how and when a company may lose emerging growth company status;
 - A brief description of the various exemptions that are available to you, such as exemptions from Section 404(b) of the Sarbanes-Oxley Act of 2002 and Section 14A(a) and (b) of the Securities Exchange Act of 1934; and
 - Your election under Section 107(b) of the Act:
 - If you have elected to opt out of the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the Act, include a statement that the election is irrevocable; or

If you have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(2)(B) of the Act, provide a risk factor explaining that this election allows you to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. Please state in your risk factor that, as a result of this election, your financial statements may not be comparable to companies that comply with public company effective dates. Include a similar statement in your critical accounting policy disclosures in MD&A.

Risk Factors, page 6

3. We note your response to comment 11 of our letter dated January 18, 2012. However, we continue to believe that to the extent that there are certain risks facing your company that are similar to early-stage companies, please tailor such risks so that they apply specifically to the circumstances of your company. For example, your risk stating that businesses and consumers might not adopt cogeneration should discuss whether businesses have adopted such technology in the last several decades that you have offered such technology. Further, to the extent the risks relate to newly introduced technology, such as your new Ultra-low emissions technology, the risk factors should clearly state this fact. Please note that these are just examples. 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. For additional guidance, please see Staff Legal Bulletin No. 7 (1999).
4. We note your response to comment 12 of our letter dated January 18, 2012. However, it does not appear that you have revised your risk factors so that they cite specific examples of how the risks have impacted your business so that investors may have a better understanding of how these risks could impact your future results and financial condition. As one example, we note that your risk factors on page 11 relating to changes in regulation and barriers to entry into the market place state that certain regulations, fees or restrictions *may* be imposed. However, we note your extensive discussion of the specific impact of various regulations on pages 47 – 51, including that you developed your Ultra-low emissions technology in response to certain regulations in Southern California. Please note that this is just one example. Please comprehensively review and revise your risk factors to tailor each risk factor so that it addresses the specific risks that impact your business and presents such risks in a clear and concise manner.
5. We note your response to comment 14 of our letter dated January 18, 2012. We continue to believe that you need to include a risk factor addressing the potential risks relating to John and George Hatsopoulos having little or no continuing stake in the company, and revise your risk factor on page 15 stating that you are controlled by a small group of majority stockholders to reflect the fact that these stockholders have registered for resale

100% of their holdings. It is unclear from your response why there is “essentially no risk that John and George Hatsopoulos will sell all of their holdings.” Given that the shareholders are registering all of their holdings for resale, in the event that the registration statement is declared effective, the shareholders would be able to sell all of their holdings. Please note, the amount being registered for resale must reflect a good faith estimate of the amount that the selling security holders intend to sell. To the extent that John and George Hatsopoulos do not intend to sell 100% of their holdings, please revise accordingly. Please advise.

Selling Security Holders, page 16

6. We note that in response to comment 15 of our letter dated January 18, 2012 you state that you have revised your disclosure to include 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. However, we are unable to locate such disclosure in this section. Please advise and revise accordingly.
7. We note that in response to comment one of our letter dated January 18, 2012 you included an “Exhibit A” which you state lists each selling security holder, including the number of shares registered on behalf of that shareholder on the S-1. However, it is unclear from Exhibit A and the disclosure provided on pages 19-21 which of the shares listed in Exhibit A are being registered for resale. For example, Exhibit A notes that there are 303,223 shares owned by George Hatsopoulos that are issuable upon future exercise of a convertible debenture, but it is unclear whether Mr. Hatsopoulos is attempting to register such shares for resale. Please advise which of the shares listed in Exhibit A are being registered, and ensure that your disclosure in this section accurately reflects the shares being registered by each selling security holder.

Business, page 24

General

8. Please provide support for your statement on page 31 that “no other methodology for obtaining this level of efficiency gain exists or will ever exist from power generation sourced from fossil fuels.” To the extent that this statement is based on management’s belief, please indicate that this is the case. Alternatively, if the information is based on reports or articles, please provide support for your statement.
9. Please provide us with copies of each source that supports your various qualitative and quantitative statements in your disclosure, clearly marked to highlight the portion or section that contains this information and cross-reference it to the appropriate location in your filing, as requested in comment 18 of our letter dated January 18, 2012.

10. Please revise your disclosure here and in your Prospectus Summary to clarify what you mean by a low-cost “process of engine after treatment.”
11. We note your disclosure on page 24 that your principal generator suppliers are Danotek Motion Technologies and Marathon Electric, that you purchase compressors from J&E Hall International, and, as noted on page 30, you use a Ford engine for the Ilios heat pump. Please file agreements with these suppliers as exhibits to the registration statement, or tell us why you are not required to do so.
12. We note your responses to comments 18 and 19 of our letter dated January 18, 2012, and that you wish to keep certain footnotes in the Background section. Further, we note that you have significantly expanded your discussion under the Industry background section and Business section so that you now include additional footnotes in your disclosure and both these footnotes and the main text contain lengthy disclosure that includes highly technical terms. Please note that your disclosure should comply with the Plain English requirements of Rule 421 of Regulation C. Please delete the footnotes and revise your disclosure throughout so that you avoid jargon and highly technical terms and present the relevant information in a clear and concise manner. For example, it does not appear that detailed descriptions, such as the difference between HHV and LHV, or a detailed description of a permanent magnet synchronous generator, are helpful to an investor. These are just examples and you should reconsider and revise the Business and Industry sections in their entirety. Further, please delete the references to external websites that you include throughout your registration statement. By including the URL or website addresses, the information contained in the website is treated as part of the disclosure. See SEC Release No. 33-7856 and SEC Release No. 33-7497 for additional guidance.
13. We note that in response to comment 23 of our letter dated January 18, 2012, you have indicated that you do not believe that your business is dependent on American DG Energy. However, we note the significant amount of your sales to American DG Energy in 2010 and 2011, as disclosed in Note 13 to the financial statements, and the fact that you have entered into various agreements with American DG Energy indicating that you will continue to do a notable amount of business with American DG Energy in the future. Based on your relationship with American DG Energy, it is unclear why you do not believe that you will have recurring revenue from American DG Energy. Please advise.

Industry Background, page 25

Our Products and Services, page 30

14. We note your response to comment 27 of our letter dated January 18, 2012. Given the emphasis placed on each of your three products, we believe it is important for investors to understand the contribution to revenues made by each of your products. Please revise your disclosure accordingly.

15. We note your disclosure on page 42 that you have used the results of certain tests to obtain an air permit exemption in New Jersey. Please revise your disclosure here, and elsewhere as appropriate, to explain why such a permit was required and whether you will need similar permits to sell your products in other states or regions.

Distribution Methods, page 34

16. Please file any material agreements with distributors and outside sales agents and representatives as exhibits to the registration statement.
17. We note that American DG Energy has exclusive sales representation rights to certain of your products in New England, and that you pay a commission to American DG Energy when you sell such products in New England. Please disclose the amount of such commission, to the extent material, as well as any material impacts on your financial operations.
18. Please disclose the purpose and or/intent of American DG Energy's grant of sales representation rights to its On-Site Utility energy service in California. In particular, please explain what this energy service is and what you intend to use it for. Please revise your disclosure elsewhere, as appropriate.

Market Potential, page 35

Tecogen's Strategy for Growth, page 38

19. Please revise or delete your disclosure throughout this section to eliminate repetitive, highly technical and speculative disclosure. The current disclosure is overly detailed, complex and unclear. To the extent that you wish to retain disclosure regarding the market potential of CHP, please present it clearly and concisely, and consider including it within another section of your prospectus, such as the Industry section.

Alliances, page 41

20. We note your revised disclosure in response to comment 32 of our letter dated January 18, 2012. Please further revise your disclosure to disclose the dates of such alliances, whether these are current alliances, and the significance of such alliances. Further, we note that you state that you believe that "most" of these agreements are not material. Please advise us as to which agreements are material and please file such agreements as exhibits to the registration statement.
21. We note your response to comment 33 of our letter dated January 18, 2012 that you do not believe your exclusive licensing agreement with Wisconsin Alumni Research Foundation is material because it "provides for a \$500 payment to the Foundation every time [you] sell an InVerde system." It is unclear why this means that the agreement is

not material. In addition, we note that this agreement covers the control software that enables your microgrid system and allows your products to be integrated, and it appears that the microgrid system is an important part of your products. Please file a copy of your exclusive licensing agreement with the Wisconsin Alumni Research Foundation as an exhibit to the registration statement or, alternatively, please explain why this agreement is not material, including why a \$500 payment for each InVerde system means the agreement is not material. See Item 601(b)(10) of Regulation S-K.

Competition, page 42

22. We note that your disclosure regarding your competitive position is overly detailed and complex and it is unclear how some of the disclosure is relevant to your company. Please comprehensively revise this section to present a clear and concise description of the competitive business conditions and your competitive position in the industry.

Certain Related Party Contracts, page 46

The Company and Its Affiliates, page 47

23. The disclosure contained in these sections appears to be duplicative of the disclosure in the section entitled “Certain Relationships and Related Transactions.” Please delete this disclosure and consolidate your disclosure under “Certain Relationships and Related Transactions.”

Intellectual Property, page 47

24. Please disclose the duration of your patents and licences.

Government Regulation, page 47

25. We note that your disclosure regarding your competitive position is overly detailed and complex. Further, we note that some of this disclosure appears to be phrased as a commentary on the industry standards, including a historical overview, as opposed to a concise description of the effects of government regulations. For example, we note your statement that “[t]he imposition of seemingly unreasonable standards by the SCAQMD was not without warning nor arbitrary....” Please comprehensively revise this section to present a clear and concise description of the existing or probable effects of government regulations on your business. See Item 101(h)(4)(ix) of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 55

26. We note your revisions in response to comment 47 of our letter dated January 18, 2012. However, we note that your Overview section continues to appear to be largely identical to the disclosure in your Prospectus Summary and in your Business section. Your MD&A Overview section should provide context for the remainder of the MD&A discussion and identify the factors that management focuses on in evaluating the financial condition and operating performance of your business. Please avoid simply repeating information that is included elsewhere in the prospectus. Please revise accordingly. See Item 303 of Regulation S-K and SEC Release 33-8350.
27. We note your revised disclosure in your results of operations discussion regarding significant fluctuations in revenues due to certain one-off sales. Please revise your disclosure in your Overview and elsewhere in your prospectus, as appropriate, to discuss the impact of such sales on your results of operations generally or tell us why you believe such sales would not constitute a known trend or uncertainty that has had or that you reasonably expect will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations. Please also consider adding risk factor disclosure relating to the nature of your sales.

Results of Operations, page 61

Year Ended December 31, 2011 Compared to Year Ended December 31, 2010, page 61

Revenues, page 61

28. We note that your revenues period over period changed significantly due to changes in product mix. Please revise your disclosures to discuss the all the underlying reasons for changes in your product mix. For instance, while you indicate that in 2010 you had recognized revenue of more than \$1.2 million from one multi-unit cogeneration project, this does not fully explain the \$2.2 million decrease in cogeneration product sales from 2010 to 2011. You also do not explain the \$1.2 million increase in chiller product sales.
29. We note your disclosure on page 62 that "Tecogen offered "turnkey" installations to its customers up until 2006 and these Tecogen installed locations have been historically [y]our best performing sites." Please revise your filing to explain what "best performing sites" means. In this regard, does the best performing mean financially or functionally and how is this performance quantified.

Loss from Operations, page 62

30. We note your disclosure that "Loss from operations for the year ended December 31, 2011 was \$1,882,902 compared to \$550,275 for the year ended December 31, 2010, a

decrease of \$1,332,627.” It appears that your loss has actually increased period over period, rather than decreased. Please revise your filing accordingly.

Non-Controlling Interest, page 63

31. Your disclosure indicates that the increase in losses attributable to Ilios was the result of increased payroll costs. Please revise your filing to quantify the increase and explain why the increase occurred.
32. Expand your discussion of your losses attributable to Ilios to also address changes in the non-controlling ownership percentages for each period to the extent they impacted the allocated losses.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosures, page 64

33. Please revise your filing to specifically state the date which you engaged McGladrey. Refer to Item 304(a)(2) of Regulation S-K.

Executive Officer and Director Compensation, page 70

Outstanding Equity Awards at Fiscal Year-End Table, page 74

34. We note that several of the footnotes state that an additional 25% of the shares underlying stock option awards will vest on each of the subsequent four anniversaries. Please clarify whether this should be each of the subsequent *three* anniversaries.

Security Ownership of Certain Beneficial Owners and Management, page 79

35. Please advise why the shares beneficially owned by John N. Hatsopoulos do not include 333,334 shares of common stock issuable upon conversion of \$100,000 principal amount of 6% convertible debentures. Please See Rule 13d-3(d)(1) under the Securities Exchange Act.
36. It does not appear that the beneficial ownership of certain of your officers and directors takes into account stock option awards that vested on February 15, 2012. For example, footnote 11 to the table states that the shares beneficially owned by Ahmed Ghoniem include 100,000 shares of common stock. However, we note that the Director Compensation Table listed on page 73, as well as the Outstanding Equity Awards at Fiscal Year-End Table on page 74, indicate that 25% of the stock option award granted to Mr. Ghoniem vested on February 15, 2012. This is just one example. Please revise the table on page 79 as well as the Selling Security Holders table on page 16 to reflect all shares that the person has the right to acquire within sixty days. See Rule 13d-3 under the Securities Exchange Act.

Certain Relationships and Related Party Transactions, page 81

37. We note your response to comment 41 of our letter dated January 18, 2012, including that EuroSite Power purchases the majority of its energy equipment from you. Please provide all information required by Item 404(d) of Regulation S-K regarding your transactions with EuroSite Power.
38. We note that you plan to file the Facilities, Support Services and Business Agreement with American DG Energy Inc. as Exhibit 10.6 to the registration statement. Please also file any other agreements you have with American DG Energy Inc., EuroSite Power and GlenRose Instruments as exhibits to the registration statement, including any agreements pursuant to which you have made sales to such companies. In particular, please file your agreements providing American DG Energy with exclusive sales representation rights and granting you sales representation rights to its On-Site Utility energy service. Please also file the exclusive distribution agreement between Ilios and American DG Energy. We note your response to comment 39 of our letter dated January 18, 2012 that you do not believe the agreement between Ilios and American DG Energy is material because the high-efficiency heating products are relatively new. However, given the exclusivity of the agreement and that the contract is with a related person as defined in Item 404 of Regulation S-K, we continue to believe that this agreement should be filed as an exhibit to the registration statement.
39. We note your disclosure on page 82 that have received payments from Levitronix LLC and Alexandros Partners LLC, which you describe as affiliated companies. Please disclose the specific relationship that makes these companies “affiliated companies.”

Consolidated Statement of Stockholders Equity, page F-5

40. We note your response to our prior comment 79. It appears that you have a material error in your 2010 Statement of Operations as a result of the incorrect calculation of the loss attributable to the non controlling interest. Please address the need to revise your financial statements, including relabeling the revised financial statements as “restated” and providing all the disclosures required by ASC 250-10-50. If you restate you revise your financial statements, please ask your auditors to revise their audit report in accordance with AU Section 508.16
41. Please provide us the underlying calculations for the stockholders’ equity adjustments related to your \$750,000 purchase of 1.5 million common shares of Ilios.

Exhibit Index

42. We note that you plan to request confidential treatment for certain exhibits. To the extent that we have comments on your request, please note that we will issue them in a separate

John N. Hatsopoulos
Tecogen Inc.
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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.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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