



DIVISION OF
CORPORATION FINANCE

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

August 2, 2012

Via E-mail

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

**Re: Tecogen Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed July 19, 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. 2 to Registration Statement on Form S-1

Risk Factors, page 6

General

1. We note your revisions in response to comment four of our letter dated May 24, 2012. We note the following:
 - It appears that in revising your risk factors you included mitigating language in your disclosure. Please note that such language should not be included in risk factors. For example, we note that your risk factor that you “expect significant competition for [y]our products and services” now includes disclosure stating that you retain a competitive advantage for most of your products. Please revise your risk factors to remove such mitigating language and to clearly present the material risk to your company. For additional guidance, please see Staff Legal Bulletin No. 7 (1999).
 - We continue to believe that your risk factors should be tailored to your business so that investors may have a better understanding of how these risks could impact your future results and financial condition. For example, your risk factor noting the significant fluctuations in revenues from period to period should provide a historical example of such fluctuations. Similarly, we note that your risk factor on page nine discussing the effect of various regulations does not discuss the

regulatory risks that are specific to your business, as discussed on page 44. In particular, we note that your disclosure on page 44 states that you “expect to get a CHP unit permitted in Southern California by year-end 2012,” but your risk factors do not discuss any risks to your business if you fail to secure such a permit. Similarly, your risk factor regarding utility-imposed barriers on the installation of your products suggests that utilities or government entities *could* impose such barriers, but your disclosure on page 45 suggests that many of such barriers are already in place. These are just examples. Please revise your risk factors accordingly.

Businesses and consumers might not adopt cogeneration solutions as a means for obtaining their electricity and power needs, page 9

2. We note your response to comment three of our letter dated May 24, 2012. Your risk factor continues to be drafted as if cogeneration is a new technology, which conflicts with your disclosure elsewhere noting that you have several decades of sales of cogeneration products. Please revise this risk factor to accurately reflect the history of your business. To the extent that the risk is that you may not be able to increase acceptance of cogeneration beyond the market that you currently serve, please clearly state this fact.
3. We note your revisions in response to comment five of our letter dated May 24, 2012. Please further revise your risk factor to address the potential risks relating to George Hatsopoulos having little or no continuing stake in the company,

Business, page 26

General

4. We have reviewed the supplemental materials that you provided to us in response to comment nine of our letter dated May 24, 2012. We were unable to locate support for the following statements.
 - “The best efficiency obtainable today is about 50% from either a combined-cycle steam turbine or a fuel cell” (page 27);
 - Table 2 – Fossil Fuel Carbon Emissions (page 32);
 - Figure 4 – Comparison of Carbon Emissions (GHG) . . . (page 33);
 - Figure 5 – Emission Levels of Criteria Pollutants . . . (page 34); and
 - Figure 6 – Comparison of Tecogen Ultra Low-Emissions . . . (page 34).

Please supplementally provide us with copies of the sources for each of these statements, clearly marked to highlight the portion or section that contains the information and cross-reference it to the appropriate location in your filing.

5. Please disclose that the data in “Figure 1 – Major Economies’ CHP Potential” is from 2008.

Tecogen’s Strategy for Growth, page 29

6. We note your statement on page 30 that the projected penetration of new CHP in California by 2030 is 6.1 MW, and extrapolating this to the country as a whole, you estimate the market addressable by your products is 40,000 MW which represents the sales equivalent of \$4.5 billion in revenue. According to the ICF Report, 6.1 MW is actually the “High Case” scenario, and the “Base Case” is 1.8 MW and the “Medium Case” is 3.6 MW. Please revise your disclosure to present a balanced discussion of the projected penetration of new CHP in California. To the extent you wish to retain the High Case, please also include the Base Case and Medium Case, including corresponding revisions to the total market addressable and the potential revenue. Please also tell us how you determined the total market addressable for the United States from the California data. Finally, please clarify whether your assumption relating to potential revenue assumes that you gain 100% of the market share that is addressable by your product lines. To the extent this is the case, please clarify your disclosure accordingly with appropriately balanced disclosure that takes into account your competitive position.
7. We note your statement on page 30 stating that the largest market sectors identified by ICF closely match your sales data. Please list the market sectors identified by ICF, and supplementally provide us with supporting material for this statement.
8. We note the chart on page 30 showing your customer distribution. The sentence preceding this chart suggests that it is your customer distribution for “several decades of sales through 2009.” Please advise whether this chart is representative of the distribution of customers for your recent sales. To the extent it is not, please include a similar chart showing customer distribution in the past five years. Please also disclose whether there have been any significant changes in customer distribution during this time.
9. We are unable to locate supporting material for the “Current Inventory” listed in “Table 1 – CHP Market Penetration by Size in California.” Please provide us with supporting material for this data. Further, we note that the chart seems to show that there is a decrease in market penetration for systems over 20 MW from now until 2029. Please advise and revise your disclosure accordingly.

Tecogen's Solution, page 32

10. We are unable to locate the part of the ASHRAE Journal article supporting your statement that your products can reduce operating costs by 30% to 60%. Further, we note that this article does not specifically address your products, but instead addresses cogeneration generally. Please revise your disclosure to remove the suggestion that this speaks to your products specifically. We also note that this article is from October 2002. Please advise us as to whether you believe that this article is still reliable. To the extent that you retain disclosure relating to this article, please clearly disclose that the data is from 2002.

Contribution to Revenue, page 37

11. It appears that you have not generated any revenue from the Ilios high-efficiency water heaters. However, we note that throughout the prospectus you consistently list this water heater as one of your three main products. Please advise us as to the status of this product, including whether there have been any sales to date. Please revise your disclosure in each section in which you discuss your main products to clearly disclose the status of sales.

Competitive Position and Business Conditions, page 40

12. It appears that the source material you have provided for "Table 3 – Comparison of CHP Technologies to Tecogen's InVerde 100" may have come from a source other than the ICF Report. Please advise and provide us with the supporting material, if different than the ICF Report. Please also provide us with a complete copy of the ICF Report.
13. Please indicate that the data in "Figure 9 – Technology Size and Market Position" is from 2004 as indicated in the ICF Report.
14. Please indicate that the data in "Figure 10 – Share of Installed CHP by Prime Mover in California" is from 2008.

Intellectual Property, page 43

15. We note your disclosure that you do not consider any one of your patents or related group of patents to be of such importance that their expiration, termination, or invalidity would materially affect your business. However, disclosure elsewhere in your prospectus suggests that certain patents are material to your business. For example, on page seven you note that given your patents and licenses, it would be difficult for any company to develop a product that competes with the InVerde CHP unit, which you also refer to in the prospectus as your premier cogeneration product. This disclosure suggests that if such patents and licenses were to expire, your competitors could create competing

products which presumably would have a material effect on your business. Please further advise as to why you do not believe any of your patents or licenses are material.

Government Regulation and Its Effect on Our Business, page 43

16. Please revise your disclosure to further explain what you mean by the statement that “because the inverter is virtually identical to those used in renewable power systems, its certification will likely be preserved . . .” Please disclose how long you will maintain the UL Certification, and any risks that you may lose such certification. Please also add disclosure in your Risk Factors section as appropriate.

Certain Relationships and Related Party Transactions, page 75

17. Please disclose the basis on which Levitronix LLC and Alexandros Partners LLC, are related persons. See Item 404(d) of Regulation S-K.
18. Please disclose the approximate dollar value of the amount involved in your Facilities and Support Services Agreement with American DG Energy. Please also disclose the monthly rate paid by American DG Energy for office space and utilities.

Unaudited Interim Financial Statements

19. Please revise your filing to include a statement of shareholders’ equity for the period from the latest fiscal year end to the interim balance sheet date. This can be done either as a separate statement or in a footnote to your financial statements. Please refer to ASC 505-10-50-2 for guidance.

Note 6 – Noncontrolling Interest, page F-12

20. Please provide us the underlying calculations for the stockholders’ equity adjustments related to the investor’s purchase of 1 million shares of Ilios for \$500,000.

Consolidated Statement of Stockholders’ Equity, page F-19

21. We have read your response to prior comment 40 of our letter dated May 24, 2012. It appears that the quantitative assessment you provided regarding the materiality of your error only addresses the impact of the error as it relates to the net loss attributable to Tecogen Inc. Please expand your assessment to address the impact of this error on all financial statement line items, including your balance sheet line items, which were impacted by the error and subsequent adjustments. This includes analysis of both the 2010 and 2011 financial statements. Please also address how you determined that the 10% impact to your net loss attributable to Tecogen Inc. is quantitatively not material. Finally, please address the appropriateness of correcting this error by making a

reclassification of \$35,764 in 2011 "in the reallocation to noncontrolling interest resulting from the Tecogen purchase of Ilois common stock."

Exhibit Index

22. We note that in response to certain of our comments in our letter dated May 24, 2012 you indicate that you intend to request confidential treatment for various exhibits. To the extent that we have comments on your request, please note that we will issue them in a separate letter. Please 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