

December 21, 2012

#### Via EDGAR

Pamela A. Long, Assistant Director Securities and Exchange Commission Division of Corporation Finance 100 F Street, NE Washington, DC 20549

Re: Tecogen Inc.

Amendment No.3 to Registration Statement

No. 333-178697

Dear Ms. Long:

The purpose of this letter is to respond to your letter of October 16, 2012 regarding the above registration statement. For your convenience, your original comments appear in bold text, followed by our response. We are concurrently filing Amendment No. 4 to the Form S-1.

# Amendment No. 4 to Registration Statement on Form S-1

## Business, page 26

#### Tecogen's Strategy for Growth, page 29

1. We note your response to comment six of our letter dated August 2, 2012. It appears that your estimate of the total growth of new CHP in the U.S., assumes that the projected penetration of new CHP in the U.S. will be the same as the projected penetration of new CHP in California. Please advise us why you believe that the growth rates will be similar and revise your disclosure accordingly.

We have revised our disclosure by modifying our analysis methodology. The calculation for market potential was based upon the assumption that the expected market growth in California can be extrapolated to the U.S. We recognize that this assumption can be questioned on the basis that California's growth may have local influences such as gas/electricity prices, as well as state regulations and incentives. Therefore, we now instead use the predicted U.S market growth potential of 35,000 MW by 2030, as the foundation of our analysis. This value was already presented earlier on page 28 and was derived from the IEA report. From this total, it is necessary to determine the portion allocated to our product size range, but this level of detail is not presented in the IEA report. So instead, we reference the ICF report on the California CHP market, which does project the breakdown of the market by size range. We make the plausible assumption that the percentage of small size CHP (50-500 kW) in California should be applicable to the U.S since this factor is a function of facility composition (i.e. hospitals, schools, hotels), which is more reasonably applied to the country as a whole. We use this percentage and

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apply it to the total US market potential to calculate the projected small size market. The remainder of the analysis methodology remains the same. We have revised our disclosure as follows:

"The Company believes that the largest number of potential new customers in the U.S. require less than 1,000 kW of electric power and less than 1,200 tons of cooling capacity. We are targeting customers in states with high electricity rates in the commercial sector, such as California, Connecticut, Massachusetts, New Hampshire, New Jersey and New York.

As stated earlier, the total US Market Potential in 2030 is projected to be 35,000 MW. In order to estimate the share of that market in our size range, we reference a study done by ICF International on the California market that breaks down projected market penetration by kW output range. According to *Combined Heat and Power Market Assessment of the California Energy Commission (April 2010)*, in 2029, new CHP in the size range that fits our products (50 kW to 500 kW), is projected to be 476 MW in the base case, or 684 MW if incentives such as carbon credits and power export credits are considered. This size range constitutes 17.4% of the total California market potential in the base case, or 11% in the case with incentives. If we assume California's apportionment of small size CHP is applicable to the country, we can estimate the US market addressable by our products as 17.4% of 35,000 MW in the base case (11% with incentives) which amounts to 6,100 MW (3,864 MW with incentives). If we assume we can capture 30% of this market, the potential over the next twenty years is 11,600 – 18,300 InVerde (100 kW) units, or approximately \$1.3 – 2.1 billion in revenue (@\$112,500 per unit)."

2. We note your response to comment nine of our letter dated August 2, 2012. Based on our review of the materials you provided to us supplementally, it appears that the title of the third column in Table 1 on page 30 should be "1-4.9" and not "1-14.9." Please revise accordingly.

We have revised our disclosure as requested and corrected the title on the third column in Table 1 on page 30 to be "1-4.9".

## Contribution to Revenue, page 37

3. We note your revisions in response to comment 11 of our letter dated August 2, 2012. Please also disclose that you have sold only one Ilios water heater and have five in production in your Prospectus Summary and Business section where you discuss your products and elsewhere in your prospectus as appropriate.

We have revised our disclosure as requested to include in the Prospectus Summary and Business section that as of the date of this prospectus, we have sold one Ilios water heater and have five in production.

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We appreciate your comments and welcome the opportunity to discuss with you our responses provided above. Please call me at (781) 466-6440 or our attorney, Edwin Miller of Sullivan & Worcester LLP in Boston, at (617) 338-2447 if you have any questions or require additional information.

Sincerely,

TECOGEN INC.
/s/ Bonnie J. Brown
By: Bonnie J. Brown
Chief Financial Officer

cc: Mindy Hooker, Staff Accountant Jeanne Baker, Staff Accountant Erin Jaskot, Staff Attorney Craig Slivka, Special Counsel