



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

January 10, 2013

Via E-Mail

Mr. Cary G. Bullock
Chairman, President, and Chief Executive Officer
ThermoEnergy Corporation
10 New Bond Street
Worcester, MA 01606

**Re: ThermoEnergy Corporation
Registration Statement on Form S-1
Filed December 14, 2012, as amended
File No. 333-185487**

Dear Mr. Bullock:

We have limited our review of your registration statement to those issues that we have addressed in our comments. In some of our comments, we may ask you to provide us information so that we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. Where 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.

Executive Officer and Director Compensation, page 42

1. Please include the disclosure required by Item 402 of Regulation S-K for the fiscal year ended December 31, 2012. Please refer to Question 117.05 of our Regulation S-K Compliance and Disclosure Interpretations.

Selling Stockholders, page 47

2. For a selling stockholder that is a legal entity, please identify the natural person or persons who exercise voting or investment control or both for the shares of common stock held by the selling stockholder. Refer to Question 140.02 of our Regulation S-K Compliance and Disclosure Interpretations..

3. Please confirm that none of the selling stockholders other than Dawson James Securities, Inc. is a broker-dealer or an affiliate of a broker-dealer.
4. Please note that if any selling stockholder is an affiliate of a broker-dealer, the prospectus should state that the selling stockholder purchased the securities in the ordinary course of business and at the time of the purchase of the securities to be resold had no agreements or understandings, directly or indirectly, with any person to distribute the securities. If the selling stockholder cannot provide these representations, the prospectus should state that the selling stockholder is an underwriter. Note that broker-dealers and their affiliates who received their securities as compensation for underwriting activities need not be identified as underwriters.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures that they have made.

Notwithstanding our comments, if you request acceleration of the effective date of the pending registration statement please provide a written statement from each registrant 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.
- 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.
- 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 before the requested effective date of the registration statement.

Mr. Cary G. Bullock
ThermoEnergy Corporation
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You may direct questions on comments and other disclosure issues to Edward M. Kelly, Esq. at (202) 551-3728 or me at (202) 551-3397.

Sincerely,

/s/ Jay Ingram

Jay Ingram
Legal Branch Chief

cc: Via E-Mail
William E. Kelly, Esq.
Nixon Peabody LLP
100 Summer Street
Boston, MA 02110