

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

December 20, 2011

<u>Via E-mail</u>
Mr. Michael F. Biehl
Chief Financial Officer
Chart Industries, Inc.
One Infinity Corporate Center Drive, Suite 300
Garfield Heights, Ohio 44125

RE: Chart Industries, Inc.
Form 10-K for the Year Ended December 31, 2010
Filed February 28, 2011
Form 10-Q for the Period Ended September 30, 2011
Filed October 27, 2011
File No. 1-11442

Dear Mr. Biehl:

We have reviewed your filings 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 within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2010

Management's Discussion and Analysis of Financial Condition and Results..., page 32 Liquidity and Capital Resources, 40 Sources and Uses of Cash, page 41

- 1. Since your foreign operations appear to be significant, please disclose in future filings the following:
 - The amount of cash and short-term investments held by foreign subsidiaries as compared to your total amount of cash and short-term investments as of year-end;
 - You would be required to accrue and pay U.S. taxes to repatriate these funds and you do not intend to repatriate them, if true; and

Mr. Michael F. Biehl Chart Industries, Inc. December 20, 2011 Page 2

Quantify the amount of cash and short-term investments held by foreign subsidiaries where the funds are not readily convertible into other foreign currencies, including U.S. dollars. Please also explain the implications of any such restrictions upon your liquidity. Please show us supplementally what your revised disclosure will look like. Refer to Item 303(a)(1) of Regulation S-K, SEC Release 33-8350 Section IV and Financial Reporting Codification 501.06.a.

Financial Statements

Note A – Nature of Operations…, page F-9 Goodwill and Other Intangible Assets, page F-11

2. Please revise your disclosure in future filings to clarify, if true, that your reporting units are your operating segments, which are also the reportable segments.

Form 10-Q for the Period Ended September 30, 2011

General

3. Please address the above comments in your interim filings, as applicable.

Exhibits 31.1, 31.2, 32.1 and 32.2

4. In future filings, please revise your certifications to include the title of the individual below the name of the individual signing the certification.

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 Exchange Act of 1934 and all applicable Exchange 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 they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Mr. Michael F. Biehl Chart Industries, Inc. December 20, 2011 Page 3

You may contact Ernest Greene, Staff Accountant at (202) 551-3733 or me at (202) 551-3769 if you have questions regarding these comments.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief