

Mail Stop 6010

July 11, 2006

VIA U.S. MAIL AND FACSIMILE (651) 484-8941

Dale H. Johnson
Chief Financial Officer
Angeion Corporation
350 Oak Grove Parkway
Saint Paul, Minnesota 55127

RE: Angeion Corporation
Form 10-KSB for the fiscal year ended October 31, 2005
Filed January 9, 2006
Form 10-QSB for the quarterly period ended April 30, 2006
File No. 001-13543

Dear Mr. Johnson:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for the fiscal year ended October 31, 2005

Item 6. Management's Discussion and Analysis of Financial Condition and Results of Operation

Results of Operations, page 22

Year Ended October 31, 2005 Compared to 2004, page 23

1. Refer to your discussion of the increase in revenue for the year ended October 31, 2005 compared to 2004. You cite increased demand for and sales of multiple products as the reason for the 14.9% increase in revenue. In future filings, please quantify the amount of the increase in revenue contributed by each material product category. At a minimum, please quantify the increase in revenue related to cardio-respiratory product systems and New Leaf products.

Consolidated Financial Statements

Consolidated Statements of Cash Flows, page 33

2. We note that you present cash flows from discontinued operations within your cash flows from operating activities. We believe your presentation of cash flows related to discontinued operations is inconsistent with SFAS 95 because you present the combined operating, investing, and financing cash flows of discontinued operations as a single amount within operating activities rather than classifying discontinued operations cash flows by activity – operating, investing, and financing - within the body of the cash flow statement itself as required by paragraph 26 of SFAS 95. For example, it appears as though the cash flows associated with the promissory note related to the ELA settlement should be classified as financing activities.

While we do not believe your presentation complies with SFAS 95, we will not object if you retroactively modify your presentation similar to a change in accounting method (without referring to the correction of an error) provided that you comply with the following:

- Please change your presentation to address the points noted above and to comply with SFAS 95 in your next periodic report. If you expect to request effectiveness of a registration statement or mail a transactional proxy statement prior to filing this periodic report, you should include the changed presentation as well as the annual cash flow information requested below in that registration/proxy statement prior to effectiveness.

- Please label either the column heading or the marginal heading as “revised” or “restated.” Characterizing the modification as “reclassified” will not suffice.
- Please make specific and prominent footnote disclosure to the effect that you have separately disclosed the operating, investing and financing portions of the cash flows attributable to discontinued operations, which in prior periods were reported on a combined basis as a single amount.
- Since your next periodic report is a Form 10-Q, please quantify and present separate totals of operating, investing and financing cash flows from discontinued operations for the most recently completed three fiscal years.

Note 12. Segment Reporting, page 46

3. In future filings, please revise to present revenues from external customers for each product and service or each group of similar product and services, as required by paragraph 37 of SFAS 131. For example, it appears that you should disclose the revenue related to cardio-respiratory product systems and New Leaf products.

Form 10-QSB for the quarterly period ended April 30, 2006

Consolidated Financial Statements

Consolidated Balance Sheets, page 2

4. In your response and within the significant accounting policies footnote of future filings, please disclose the nature of the balance sheet line item “advance payments from customers.” The disclosure should discuss the circumstances under which you receive payments from customers in advance of a sale and when the revenue from the advances is typically recognized.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. 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 responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed decision. Since the company and its management are in

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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 connection with responding to our comments, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Kristin Lochhead at (202) 551-3664 or me at (202) 551-3676 if you have questions. In this regard, please do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671 with any other questions.

Sincerely,

Brian Cascio
Accounting Branch Chief