

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549-7010

July 5, 2006

Room 7010

Kathy I. Sheffield Treasurer Aaon, Inc. 2425 South Yukon Avenue Tulsa, Oklahoma 74107

Re: Aaon, Inc.

Form 10-K for Fiscal Year Ended December 31, 2005 Forms 10-Q for the Fiscal Quarter Ended March 31, 2006

File No. 000-18953

Dear Ms. Sheffield:

We have reviewed your response letter dated June 20, 2006 and have the following comments. Where indicated, we think you should revise your document. 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.

Form 10-K for Fiscal Year Ended December 31, 2005

Segments, page 38

1. We note your response to prior comment 2, which indicates the Company has three operating segments that are aggregated into one reportable segment for reporting purposes. With regards to your ACP segment, tell us why ACP gross profit and operating profit margins have been significantly less than Aaon, Inc. during 2003 and 2004, but exceeded Aaon margins in 2005 and the first quarter of 2006. The change in trends between ACP's and Aaon Inc.'s operating results lead us to believe that the operating statistics of these two segments are not converging, even though they temporarily appeared to have done so in 2005, and therefore are not economically similar. Please also be advised that if segments generally do not have similar economic characteristics, but in the current year

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have similar operating results and it is not expected that similar operating results will continue in the future, it should not be presumed that the segments should be aggregated for current-year segment disclosures. Refer to paragraphs 73-74 of SFAS 131 and Question 8 of the FASB Staff Implementation Guide for SFAS 131.

Additionally, we note that your aggregation analysis did not solely rely on operating statistics of ACP and the comparison of those statistics to Aaon or Aaon Canada, as ACP products are vertically integrated with those of Aaon Inc. and Aaon Canada and the pricing of ACP products to other operating divisions is determined by the CODM. Please note that paragraph 80 of SFAS 131 discusses the Board's determination that consideration of pricing between vertically integrated segments would be a departure from the management approach to segments.

2. With regards to your Canadian operating segment, we note your view that although Canada's gross margins and gross margin percentages were significantly lower than Aaon's and ACP's during 2004 and 2005, you expect them to converge in the future. Please provide us with support for this conclusion, including (1) the timeframe in which you expect convergence of your Canadian segment's performance and (2) quantification of any specific anomalies in the Canadian segment's performance from May 2004 through March 31, 2006, which would explain the differences in this segment's performance in the past, but which would not have an effect in the future. Based on the operating results provided in your response, it does not appear that Canadian operations are economically similar. Therefore, it appears as if aggregation of Aaon Canada would not be appropriate.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Melissa Rocha at (202) 551-3854 or me at (202) 551-3255 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Nili N. Shah Branch Chief Kathy I. Sheffield Aaon, Inc. July 5, 2006 Page 3