



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

September 6, 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 August 31, 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

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1. We note your response to prior comments 1 and 2 of our letter dated July 5, 2006. It remains unclear to us, based on the information you have provided, how you determined that you have only one reportable segment under SFAS 131. We reviewed your CODM reports and your previous responses and noted the following:
 - Your response to prior comment 1 indicates that you no longer consider ACP an operating segment as defined in paragraph 10 of SFAS 131, as the CODM does not make decisions about resources allocated to the segment based on operating results of ACP. We continue to note that discrete financial

information is prepared for the CODM on a regular basis for ACP, AAON, Inc. and AAON Canada. It is unclear why you would have a process in place to consistently collect and present information to the CODM for ACP, if the CODM did not find this information useful in managing the company. We also note your response dated June 20, 2006, which states that the CODM uses the reports provided to us in “evaluating segment performance and determining appropriate resource allocations.” Further, your statements in your response dated August 31, 2006, that (1) decisions related to resource allocation are made considering information that includes the component parts manufactured at ACP and AAON, Inc. and (2) your CODM does review the information regarding ACP to ensure profits are maximized on completed HVAC units, indicate that ACP does meet the definition of an operating segment.

- Your response to prior comment 1 did not address 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. Accordingly, it continues to appear that ACP and AAON are not economically similar for the purposes of aggregation, pursuant to paragraph 17 of SFAS 131.
- You state that the same senior management oversees critical functions of each business unit. However, this structure is not necessarily indicative of one segment, as a single manager may be the segment manager for more than one operating segment. Please refer to paragraph 14 of SFAS 131.
- Based on your response to prior comment 2, we note a significant difference in margins between AAON, Inc. and AAON Canada for the periods provided, as well as opposite trends in their performance. We further note the reasons you present for these differences, such as the evolution of a pricing strategy and efforts to improve AAON Canada’s production process and volume, as well as your estimate that AAON Canada’s and AAON, Inc.’s performance will continue to differ through the end of 2008. Based on these factors, it appears that investors would benefit from disclosure of disaggregated information related to AAON Canada to better understand your past performance and assess your future prospects, consistent with paragraph 3 of SFAS 131.

In light of the above, it appears that disaggregated segment disclosure for ACP, AAON Canada and AAON, Inc. is necessary to understand the disparate gross margins and operating profit margins amongst these segments. Accordingly, please restate your segment disclosures for all periods presented in your 2005 Form 10-K and 2006 Forms 10-Q to separately present ACP, AAON Canada and AAON, Inc.

2. If you conclude that your prior filings should not be relied upon due to an error, please be advised that you are required to disclose the information listed under Item 4.02(a) of Form 8-K within four days of your conclusion.

We remind you that when you file your Form 10-K for the year ended December 31, 2005 and the subsequent Forms 10-Q for the quarters ended March 31, 2006 and June 30, 2006, which include the above mentioned restatement, you should appropriately address the following:

- an explanatory paragraph in the reissued audit opinion,
- full compliance with SFAS 154, paragraphs 25 and 26,
- fully update all affected portions of the document, including MD&A,
- updated Item 9A. disclosures should include the following:
 - a discussion of the restatement and the facts and circumstances surrounding it,
 - how the restatement impacted the CEO and CFO's original conclusions regarding the effectiveness of their disclosure controls and procedures,
 - changes to internal controls over financial reporting, and
 - anticipated changes to disclosure controls and procedures and/or internal controls over financial reporting to prevent future misstatements of a similar nature.
- Refer to Items 307 and 308(c) of Regulation S-K.
- updated reports from management and your independent auditors regarding your internal controls over financial reporting.
- updated certifications.

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