

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

Mail Stop 4631

February 23, 2010

via U.S. mail and facsimile

Mark O. Eisele, CFO Applied Industrial Technologies, Inc. 1 Applied Plaza Cleveland, Ohio 44115

RE: Applied Industrial Technologies, Inc.

Form 10-K for the Fiscal Year Ended June 30, 2009

Filed August 19, 2009

Form 10-Q for the Fiscal Quarter Ended September 30, 2009 and

December 31, 2009

Definitive Proxy Statement on Schedule 14A

Filed September 4, 2009

File No. 1-2299

Dear Mr. Eisele:

We have reviewed your response letter dated February 8, 2010, and have the following additional comment. Where indicated, we think you should revise your document in future filings 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. We also 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-Q for the Fiscal Quarter Ended December 31, 2009

<u>Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18</u>

Critical Accounting Policies, page 25

1. We note the disclosures you have provided in response to comment 3 in our letter dated January 25, 2010. In future filings, including your third quarter of fiscal year 2010 Form 10-Q, please further revise the disclosure to include the following additional information noted from your February 8, 2010 response letter to allow

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investors to better understand the facts and circumstances that led to the impairment charge in the fourth quarter of fiscal year 2009 and subsequent to testing in the second and third quarters of fiscal year 2009:

- Please clarify the following statement: "Actual sales and cash flow operating results for the FPR companies deteriorated throughout the fiscal year, and for the fourth quarter of fiscal year 2009 were 44% and 82%, respectively, below what was originally projected and forecasted." In this regard, it is unclear what the difference was for actual versus projected sales and cash flow operating results for fiscal year 2009 and for the fourth quarter of fiscal year 2009. Further, please clarify that the significant difference between actual sales and operating income and the original projections of sales and operating income significantly differed during the second, third and fourth quarters of fiscal year 2009 and not just in the fourth quarter of fiscal year 2009.
- Disclose the percentage by which actual fourth quarter of fiscal year 2009 results for the FPR companies and for the overall fluid power business were below the projections used in the second and third quarters of fiscal year 2009 discounted cash flow analyses, as noted in your response letter dated February 8, 2009.
- Disclose that your previous cash flow forecasts assumed that the business would return to pre-financial crisis operating results and cash flow levels within a four year time frame. Disclose that the change from a four year time frame to a beyond five year time frame significantly impacted your estimate of fair value of the reporting unit, resulting in the impairment charge. Please also disclose the reporting unit-specific reasons for the change in assumption.

Please provide us with the disclosure you intend to include in your third quarter of fiscal year 2010 Form 10-Q and fiscal year 2010 Form 10-K.

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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 letter on EDGAR that keys your responses to our comments and provides any requested information. Detailed response letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

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You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters. For other comments, please contact Chambre Malone, Staff Attorney, at (202) 551-3262, or in her absence, Andrew Schoeffler, Senior Staff Attorney, at (202) 551-3748.

Sincerely,

Terence O'Brien Accounting Branch Chief