



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

January 29, 2008

VIA U.S. MAIL and FACSIMILE

Mr. Lawrence D. Firestone
Executive Vice President and Chief Financial Officer
1625 Sharp Point Drive
Fort Collins, CO 80525

RE: Advanced Energy Industries, Inc.
Form 10-K for the fiscal year ended December 31, 2006
Filed February 20, 2007
File No. 000-26966

Dear Mr. Firestone:

We have completed our review of your Form 10-K and related filings and do not, at this time, have any further comments.

Sincerely,

Martin F. James
Senior Assistant Chief Accountant