



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

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

January 14, 2010

Lawrence D. Firestone
Chief Financial Officer
Advanced Energy Industries, Inc.
1625 Sharp Point Drive
Fort Collins, CO 80525

RE: Advanced Energy Industries, Inc.
Form 10-K for the fiscal year ended December 31, 2008
Filed February 27, 2009
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,

Brian Cascio
Accounting Branch Chief