ADVANCED ENERGY INDUSTRIES INC Form SC 13G/A August 16, 2005

> UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

> > SCHEDULE 13G

Under the Securities Exchange Act of 1934

(Amendment No. 3)*

Advanced Energy Industries, Inc. (Name of Issuer)

Common Stock (Title of Class of Securities)

007973100 (CUSIP Number)

December 31, 2004 (Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed: [X] Rule 13d-1(b) [] Rule 13d-1(c) [] Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP: 007973100 Page 1 of 7 NAMES OF REPORTING PERSONS 1 I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY) Capital Research and Management Company 95-1411037 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE 2 INSTRUCTIONS) (a) (b) 3 SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION 4 Delaware 5 SOLE VOTING POWER NONE 6 SHARED VOTING POWER NUMBER OF SHARES NONE BENEFICIALL Y OWNED BY 7 SOLE DISPOSITIVE POWER EACH REPORTING 1,700,000 PERSON WITH: SHARED DISPOSITIVE POWER 8 NONE AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 9 1,700,000 Beneficial ownership disclaimed pursuant to Rule 13d-4

10 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS)

11 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.2%

- 12 TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)
 - ΙA

CUSIP: 007973100

Page 2 of 7

SECURITIES AND EXCHANGE COMMISSION Washington, DC 20549

Schedule 13G Under the Securities Exchange Act of 1934

Amendment No. 3

- Item 1(a) Name of Issuer: Advanced Energy Industries, Inc.
- Item 1(b) Address of Issuer's Principal Executive Offices: 1625 Sharp Point Drive Fort Collins, CO 80525
- Item 2(a) Name of Person(s) Filing: Capital Research and Management Company
- Item 2(b) Address of Principal Business Office or, if none, Residence: 333 South Hope Street Los Angeles, CA 90071
- Item 2(c) Citizenship: N/A
- Item 2(d) Title of Class of Securities: Common Stock
- Item 2(e) CUSIP Number: 007973100
- Item 3 If this statement is filed pursuant to sections 240.13d-1(b)
 or 240.13d-2(b) or (c), check whether the person filing is a:
 (d) [X] Investment company registered under section 8
 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
 (e) [X] An investment adviser in accordance with
 section 240.13d-1(b)(1)(ii)(E).

Item 4 Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

See page 2

- (a) Amount beneficially owned:
- (b) Percent of class:

- (c) Number of shares as to which the person has:
- (i) Sole power to vote or to direct the vote:
- (ii) Shared power to vote or to direct the vote:
- (iii) Sole power to dispose or to direct the disposition of:
- (iv) Shared power to dispose or to direct the disposition of:

CUSIP: 007973100

Page 3 of 7

Capital Research and Management Company, an investment adviser registered under Section 203 of the Investment Advisers Act of 1940 is deemed to be the beneficial owner of 1,700,000 shares or 5.2% of the 32,686,000 shares of Common Stock believed to be outstanding as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940.

- Item 5 Ownership of Five Percent or Less of a Class. If this
 statement is being filed to report the fact that as of the date
 hereof the reporting person has ceased to be the beneficial
 owner of more than five percent of the class of securities,
 check the following: []
- Item 6 Ownership of More than Five Percent on Behalf of Another Person: N/A
- Item 7 Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company or Control Person.: N/A
- Item 8 $$\rm Identification$ and Classification of Members of the Group: $$\rm N/A$$
- Item 9 Notice of Dissolution of Group: N/A

Item 10 Certification

By signing below, I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: February 4, 2005

Signature: *Paul G. Haaga, Jr. Name/Title: Paul G. Haaga, Jr., Executive Vice

President Capital Research and Management Company

CUSIP: 007973100

Page 4 of 7

*By /s/ James P. Ryan James P. Ryan Attorney-in-fact

> Signed pursuant to a Power of Attorney dated January 10, 2005 included as an Exhibit to Schedule 13G filed with the Securities and Exchange Commission by Capital Research and Management Company on February 4, 2005 with respect to Advanced Energy Industries.

Please see attached Power of Attorney that was inadvertently omitted on the February 7, 2005 filing.

CUSIP: 007973100

Page 5 of 7

POWER OF ATTORNEY

The undersigned do hereby appoint James P. Ryan, Liliane Corzo and Angela Mitchell, and each of them, acting singly, with full power of substitution, as the true and lawful attorney of the undersigned, to sign on behalf of the undersigned in respect of the ownership of equity securities deemed held by the undersigned, Capital Research and Management Company, AMCAP Fund, Inc., American Balanced Fund, Inc., American Mutual Fund, Inc., American Funds Insurance Series (Growth Fund, International Fund, Growth-Income Fund, Asset Allocation Fund, Global Growth Fund, Global Small Capitalization Fund, New World Fund), The Bond Fund of America, Inc., Capital Income Builder, Inc., Capital World Growth and Income Fund, Inc., EuroPacific Growth Fund, Fundamental Investors, Inc., The Growth Fund of America, Inc., The Income Fund of America. Inc., The Investment Company of America, The New Economy Fund, New Perspective Fund, Inc., New World Fund, Inc., SMALLCAP World Fund, Inc., and Washington Mutual Investors Fund, Inc., and to be reported pursuant to Sections 13(d), 13(f) and 13(g) of the Securities Exchange Act of 1934, as amended, and to execute joint filing agreements with respect to such filings.

IN WITNESS WHEREOF, this Power of Attorney, has been executed as of the 10th day of January, 2005.

Capital Research and Management Company

/s/ Paul G. Haaga, Jr.

Name: Paul G. Haaga, Jr. Title: Executive Vice President

American Balanced Fund, Inc.

/s/ Patrick F. Quan

Name: Patrick F. Quan Title: Secretary

The Growth Fund of America, Inc. The Income Fund of America, Inc. Fundamental Investors, Inc.

/s/ Paul G. Haaga, Jr. Name: Paul G. Haaga, Jr. Title: Senior Vice President AMCAP Fund, Inc. American Mutual Fund, Inc. The Bond Fund of America, Inc. /s/ Julie F. Williams Name: Julie F. Williams CUSIP: 007973100 Page 6 of 7 Title: Secretary American Funds Insurance Series The New Economy Fund SMALLCAP World Fund, Inc. /s/ Chad L. Norton Name: Chad L. Norton Title: Secretary Capital Income Builder, Inc. Capital World Growth and Income Fund, Inc. EuroPacific Growth Fund The Investment Company of America New Perspective Fund, Inc. New World Fund, Inc. /s/ Vincent P. Corti Vincent P. Corti Name: Title: Secretary Washington Mutual Investors Fund, Inc. /s/ Howard L. Kitzmiller Name: Howard L. Kitzmiller Title: Senior Vice President, Secretary and Treasurer

CUSIP: 007973100

Page 7 of 7