

# FORM 4

[ ] Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

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

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### STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or  
Section 30(h) of the Investment Company Act of 1940

|   |  |   |  |   |  |
|---|--|---|--|---|--|
| 1. Name and Address of Reporting Person * |  | 2. Issuer Name and Ticker or Trading Symbol       |  | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)  |  |
| SCHOLL RICHARD A                          |  | ADVANCED ENERGY INDUSTRIES<br>INC [ AEIS ]        |  | <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner<br><input checked="" type="checkbox"/> X Officer (give title below) <input type="checkbox"/> Other (specify below)<br><b>SVP and CTO</b> |  |
| (Last) (First) (Middle)                   |  | 3. Date of Earliest Transaction (MM/DD/YYYY)      |  |   |  |
| 1625 SHARP POINT DRIVE                    |  | 7/20/2004   |  |   |  |
| (Street)                                  |  | 4. If Amendment, Date Original Filed (MM/DD/YYYY) |  | 6. Individual or Joint/Group Filing (Check Applicable Line)   |  |
| FORT COLLINS, CO US                       |  |   |  | <input checked="" type="checkbox"/> X Form filed by One Reporting Person<br><input type="checkbox"/> Form filed by More than One Reporting Person   |  |
| (City) (State) (Zip)                      |  |   |  |   |  |

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security<br>(Instr. 3) | 2. Trans. Date | 2A. Deemed<br>Execution<br>Date, if any | 3. Trans. Code<br>(Instr. 8) |   | 4. Securities Acquired (A)<br>or Disposed of (D)<br>(Instr. 3, 4 and 5) |               |       | 5. Amount of Securities Beneficially Owned<br>Following Reported Transaction(s)<br>(Instr. 3 and 4) | 6. Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr.<br>4) | 7. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|------------------------------------|----------------|---|------------------------------|---|---|---------------|-------|---|---|---|
|                                    |                |   | Code                         | V | Amount  | (A) or<br>(D) | Price |   |   |   |
| Common Stock                       |                |   |                              |   |   |               |       | 209824  | D   |   |
| Common Stock                       |                |   |                              |   |   |               |       | 20292   | I   | By Spouse   |

**Table II - Derivative Securities Beneficially Owned ( e.g. , puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivate<br>Security<br>(Instr. 3) | 2. Conversion<br>or Exercise<br>Price of<br>Derivative<br>Security | 3. Trans.<br>Date | 3A. Deemed<br>Execution<br>Date, if any | 4. Trans.<br>Code<br>(Instr. 8) | 5. Number of<br>Derivative<br>Securities Acquired<br>(A) or Disposed of<br>(D)<br>(Instr. 3, 4 and 5) |  | 6. Date Exercisable and<br>Expiration Date |                    | 7. Title and Amount of<br>Securities Underlying<br>Derivative Security<br>(Instr. 3 and 4) |                                  | 8. Price of<br>Derivative<br>Security<br>(Instr. 5) | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | 10. Ownership<br>Form of<br>Derivative<br>Security:<br>Direct (D)<br>or Indirect<br>(I) (Instr.<br>4) | 11. Nature<br>of Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |
|--|--|-------------------|---|---------------------------------|---|--|--|--------------------|--|----------------------------------|---|--|---|--|
|  |  |                   |   |                                 |   |  | Date<br>Exercisable                        | Expiration<br>Date | Title  | Amount or<br>Number of<br>Shares |   |  |   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$28.1563  |                   |   |                                 |   |  | 2/9/2000<br>(1)                            | 2/9/2009           | Common<br>Stock  | 10000                            |   | 10000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$43.6875  |                   |   |                                 |   |  | 1/13/2001<br>(1)                           | 1/13/2010          | Common<br>Stock  | 10000                            |   | 20000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$26.125   |                   |   |                                 |   |  | 2/7/2002<br>(1)                            | 2/7/2011           | Common<br>Stock  | 5000                             |   | 25000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$28.55  |                   |   |                                 |   |  | 4/11/2002<br>(1)                           | 4/11/2011          | Common<br>Stock  | 5000                             |   | 30000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$36.49  |                   |   |                                 |   |  | 5/24/2002<br>(3)                           | 5/24/2011          | Common<br>Stock  | 1000                             |   | 31000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$32.19  |                   |   |                                 |   |  | 7/11/2002<br>(1)                           | 7/11/2011          | Common<br>Stock  | 5000                             |   | 36000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$18.00  |                   |   |                                 |   |  | 10/10/2002<br>(1)                          | 10/10/2011         | Common<br>Stock  | 5000                             |   | 41000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$24.90  |                   |   |                                 |   |  | 2/12/2003<br>(1)                           | 2/12/2012          | Common<br>Stock  | 10000                            |   | 51000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$38.55  |                   |   |                                 |   |  | 4/16/2003<br>(1)                           | 4/16/2012          | Common<br>Stock  | 10000                            |   | 61000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$17.85  |                   |   |                                 |   |  | 7/18/2003<br>(1)                           | 7/18/2012          | Common<br>Stock  | 10000                            |   | 71000  | D   |  |
| Employee Stock<br>Option (right to<br>buy)     | \$7.70   |                   |   |                                 |   |  | 10/17/2003<br>(1)                          | 10/17/2012         | Common<br>Stock  | 10000                            |   | 81000  | D   |  |

| Table II - Derivative Securities Beneficially Owned ( e.g. , puts, calls, warrants, options, convertible securities) |  |                |                                   |                           |   |  |     |   |                 |   |                            |  |  |  |  |
|--|--|----------------|-----------------------------------|---------------------------|---|--|-----|---|-----------------|---|----------------------------|--|--|--|--|
| 1. Title of Derivate Security (Instr. 3)   | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. Code (Instr. 8) |   | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) |     | 6. Date Exercisable and Expiration Date |                 | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) |                            | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|  |  |                |                                   | Code                      | V | (A)  | (D) | Date Exercisable                        | Expiration Date | Title   | Amount or Number of Shares |  |  |  |  |
| Employee Stock Option (right to buy)   | \$9.12   |                |                                   |                           |   |  |     | 2/12/2004 <a href="#">(1)</a>           | 2/12/2013       | Common Stock  | 5000                       |  | 86000  | D  |  |
| Employee Stock Option (right to buy)   | \$7.61   |                |                                   |                           |   |  |     | 4/16/2004 <a href="#">(1)</a>           | 4/16/2013       | Common Stock  | 5000                       |  | 91000  | D  |  |
| Employee Stock Option (right to buy)   | \$19.24  |                |                                   |                           |   |  |     | 7/23/2004 <a href="#">(1)</a>           | 7/23/2013       | Common Stock  | 5000                       |  | 96000  | D  |  |
| Employee Stock Option (right to buy)   | \$22.52  |                |                                   |                           |   |  |     | 10/15/2004 <a href="#">(1)</a>          | 10/15/2013      | Common Stock  | 5000                       |  | 101000   | D  |  |
| Employee Stock Option (right to buy)   | \$22.30  |                |                                   |                           |   |  |     | 2/11/2005 <a href="#">(1)</a>           | 2/11/2014       | Common Stock  | 2500                       |  | 103500   | D  |  |
| Employee Stock Option (right to buy)   | \$20.81  |                |                                   |                           |   |  |     | 4/14/2005 <a href="#">(1)</a>           | 4/14/2014       | Common Stock  | 2500                       |  | 106000   | D  |  |
| Employee Stock Option (right to buy)   | \$12.80  | 7/20/2004      |                                   | A                         |   | 2500   |     | 7/20/2005 <a href="#">(1)</a>           | 7/20/2014       | Common Stock  | 2500                       | \$12.80                                    | 108500 <a href="#">(2)</a>   | D  |  |
| Employee Stock Option (right to buy)   | \$12.80  | 7/20/2004      |                                   | A                         |   | 3750   |     | 7/20/2005 <a href="#">(1)</a>           | 7/20/2014       | Common Stock  | 3750                       | \$12.80                                    | 78132 <a href="#">(4)</a>  | I  | By Spouse  |

#### Explanation of Responses:

- (1) Stock options dated 02/09/1999, 01/13/2000, 02/07/2001, 04/11/2001, 07/11/2001, 10/10/2001, 02/12/2002, 04/16/2002, 07/18/2002, 10/17/2002, 02/12/2003, 04/16/2003, 07/23/2003, 10/15/2003, 02/11/2004, 04/14/2004 and 07/20/2004 are such that 1/4 of the shares become exercisable on the first anniversary following the date of grant, and the remaining shares become exercisable in equal increments each quarter for 3 years thereafter.
- (2) Mr. Scholl has Employee Stock Options (right to buy) for a total of 108,500 shares of Common stock.
- (3) Stock option dated May 24, 2001 is fully exercisable 1 year from the date of grant, which was May 24, 2002.
- (4) Mr. Scholl has Employee Stock Options (right to buy) for a total of 78,132 shares, indirectly by spouse, of Common stock with varying exercises prices and expiration dates.

#### Reporting Owners

| Reporting Owner Name / Address                                    | Relationships |           |             |       |
|---|---------------|-----------|-------------|-------|
|   | Director      | 10% Owner | Officer     | Other |
| SCHOLL RICHARD A<br>1625 SHARP POINT DRIVE<br>FORT COLLINS, CO US |               |           | SVP and CTO |       |

#### Signatures

**Michael El-Hillow - Attorney-in-Fact**

**7/21/2004**

**\*\***Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

\* If the form is filed by more than one reporting person, *see* Instruction 4(b)(v).

\*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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