

# FORM 4

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

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continue. See Instruction 1(b).

### 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)                                    |
| SCHATZ DOUGLAS S                          | ADVANCED ENERGY INDUSTRIES<br>INC [ AEIS ]        | <input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner                    |
| (Last) (First) (Middle)                   | 3. Date of Earliest Transaction (MM/DD/YYYY)      | <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) |
| 1625 SHARP POINT DRIVE                    | 4/14/2004   | Chief Executive Officer   |
| (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"/> Form filed by One Reporting Person  |
| (City) (State) (Zip)                      |   | <input type="checkbox"/> Form filed by More than One Reporting Person   |

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                       |                |   |                              |   |   |               |       | 10657782 <a href="#">(3)</a>  | I   | By<br>Douglas<br>S. Schatz<br>and Jill E.<br>Schatz<br>Family<br>Trust |

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)     | \$10.032   |                |                                   |                           |   |  |     | 2/12/2004 (1)                           | 2/12/2008       | Common Stock  | 25000                      |  | 25000  | D  |  |
| Employee Stock Option (right to buy)     | \$8.371  |                |                                   |                           |   |  |     | 4/16/2004 (1)                           | 4/16/2008       | Common Stock  | 25000                      |  | 50000  | D  |  |
| Employee Stock Option (right to buy)     | \$8.371  |                |                                   |                           |   |  |     | 4/16/2004 (1)                           | 4/16/2008       | Common Stock  | 25000                      |  | 50000  | D  |  |
| Employee Stock Option (right to buy)     | \$21.164   |                |                                   |                           |   |  |     | 7/23/2004 (1)                           | 7/23/2008       | Common Stock  | 3295                       |  | 53295  | D  |  |
| Employee Stock Option (right to buy)     | \$19.24  |                |                                   |                           |   |  |     | 7/23/2004 (1)                           | 7/23/2013       | Common Stock  | 21705                      |  | 75000  | D  |  |
| Employee Stock Option (right to buy)     | \$22.52  |                |                                   |                           |   |  |     | 10/15/2004 (1)                          | 10/15/2013      | Common Stock  | 25000                      |  | 100000   | D  |  |
| Employee Stock Option (right to buy)     | \$22.30  |                |                                   |                           |   |  |     | 2/11/2005 (1)                           | 2/11/2014       | Common Stock  | 21250                      |  | 121250   | D  |  |
| Employee Stock Option (right to buy)     | \$20.81  | 4/14/2004      |                                   | A                         |   | 21250  |     | 4/14/2005 (1)                           | 4/14/2014       | Common Stock  | 21250                      | \$20.81                                    | 142500 (2)   | D  |  |

#### Explanation of Responses:

- Stock options dated 02/12/2003, 04/16/2003, 07/23/2003, 10/15/2003, 02/11/2004 and 04/14/2004 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.
- Mr. Schatz has Employee Stock Options (right to buy) for a total of 142,500 shares of Common Stock.

(3) Mr. Schatz owns indirectly, by Douglas S. Schatz & Jill E. Schatz Family Trust 10,657,782 shares of Advanced Energy Industries, Inc. common stock.

Reporting Owners

| Reporting Owner Name / Address                                    | Relationships |           |                         |       |
|---|---------------|-----------|-------------------------|-------|
|   | Director      | 10% Owner | Officer                 | Other |
| SCHATZ DOUGLAS S<br>1625 SHARP POINT DRIVE<br>FORT COLLINS, CO US | X             | X         | Chief Executive Officer |       |

Signatures

Michael El-Hillow - Attorney-in-Fact

4/15/2004

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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