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				
		(Check all applicable)				
EL HILLOW MICHAEL	ADVANCED ENERGY INDUSTRIES					
	INC [AEIS]	Director10% Owner				
(Last) (First) (Middle)	3. Date of Earliest Transaction (MM/DD/YYYY)	X Officer (give title below) Other (specify below)				
		EVP Finance and Admin. and CFO				
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 (City) (State) (Zip)		X Form filed by One Reporting Person Form filed by More than One Reporting Person				

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

				-				-		
1. Title of Security	2. Trans. Date	2A. Deemed	3. Trans. Coo	le	4. Securit	ies Acquire	ed (A)	5. Amount of Securities Beneficially Owned	6.	7. Nature
(Instr. 3)		Execution	(Instr. 8)		or Dispos	ed of (D)		Following Reported Transaction(s)	Ownership	of Indirect
		Date, if any			(Instr. 3, 4	4 and 5)		(Instr. 3 and 4)	Form:	Beneficial
									Direct (D)	Ownership
									or Indirect	(Instr. 4)
						(A) or			(I) (Instr.	
			Code	V	Amount	(D)	Price		4)	
Common Stock								2000	D	
Common Stock								2000	5	

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

	- ****							(», ••••••, ··		prions, conve				
1. Title of Derivate Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	of vative	3A. Deemed Execution Date, if any	Code		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)			Securities Beneficially Owned Following	Ownership Form of Derivative Security: Direct (D)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares		Transaction(s)	or Indirect (I) (Instr. 4)	
Employee Stock Option (right to buy)	\$18.00							10/10/2002 (1)	10/10/2011	Common Stock	50000		50000	D	
Employee Stock Option (right to buy)	\$24.90							2/12/2003 (1)	2/12/2012	Common Stock	12500		62500	D	
Employee Stock Option (right to buy)	\$38.55							4/16/2003 (1)	4/16/2012	Common Stock	12500		75000	D	
Employee Stock Option (right to buy)	\$17.85							7/18/2003 (1)	7/18/2012	Common Stock	12500		87500	D	
Employee Stock Option (right to buy)	\$7.70							10/17/2003 <u>(1)</u>	10/17/2012	Common Stock	12500		100000	D	
Employee Stock Option (right to buy)	\$9.12							2/12/2004 (1)	2/12/2013	Common Stock	20000		120000	D	
Employee Stock Option (right to buy)	\$7.61							4/16/2004 (1)	4/16/2013	Common Stock	20000		140000	D	
Employee Stock Option (right to buy)	\$19.24							7/23/2004 (<u>1</u>)	7/23/2013	Common Stock	20000		160000	D	
Employee Stock Option (right to buy)	\$22.52							10/15/2004 (1)	10/15/2013	Common Stock	20000		180000	D	
Employee Stock Option (right to buy)	\$22.30							2/11/2005 (1)	2/11/2014	Common Stock	17500		197500	D	
Employee Stock Option (right to buy)	\$20.81							4/14/2005 (1)	4/14/2014	Common Stock	17500		215000	D	
Employee Stock Option (right to buy)	\$12.80	7/20/2004		А		17500		7/20/2005 (1)	7/20/2014	Common Stock	17500	\$12.80	232500 <u>(2)</u>	D	

Explanation of Responses:

- Stock options dated 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. El-Hillow has Employee Stock Options (right to buy) for a total of 232,500 shares of Common Stock.

Reporting Owners

Penorting Owner Name / Address	Relationships							
Reporting Owner Name / Address	Director	10% Owner	Officer	Other				
EL HILLOW MICHAEL								
1625 SHARP POINT DRIVE			EVP Finance and Admin. and CFO					
FORT COLLINS, CO US								

Signatures

Michael El-Hillow	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.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.