

FORM 4

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)	
WASSERMAN YUVAL		ADVANCED ENERGY INDUSTRIES INC [AEIS]		<input checked="" type="checkbox"/> Director _____ 10% Owner <input checked="" type="checkbox"/> Officer (give title below) _____ Other (specify below) President & CEO	
(Last) (First) (Middle)		3. Date of Earliest Transaction (MM/DD/YYYY)			
1625 SHARP POINT DRIVE		5/4/2018			
(Street)		4. If Amendment, Date Original Filed (MM/DD/YYYY)		6. Individual or Joint/Group Filing (Check Applicable Line)	
FORT COLLINS, CO 80525				<input checked="" type="checkbox"/> Form filed by One Reporting Person <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 (Instr. 3)	2. Trans. Date	2A. Deemed Execution Date, if any	3. Trans. Code (Instr. 8)		4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	5/4/2018		M		930 (1)	A	\$12.77	141929	D	
Common Stock	5/4/2018		M		3938 (1)	A	\$15.65	145867	D	
Common Stock	5/4/2018		M		2361 (1)	A	\$16.25	148228	D	
Common Stock	5/4/2018		M		3938 (1)	A	\$14.52	152166	D	
Common Stock	5/4/2018		M		7876 (1)	A	\$12.44	160042	D	
Common Stock	5/4/2018		M		11813 (1)	A	\$9.51	171855	D	
Common Stock	5/4/2018		M		8500 (1)	A	\$11.02	180355	D	
Common Stock	5/4/2018		M		13171 (1)	A	\$18.77	193526	D	
Common Stock	5/4/2018		M		3013 (1)	A	\$14.21	196539	D	
Common Stock	5/4/2018		S		8345 (1)	D	\$61.22 (2)	188194	D	
Common Stock	5/4/2018		S		38385 (1)	D	\$62.53 (3)	149809	D	
Common Stock	5/4/2018		S		8810 (1)	D	\$62.96 (4)	140999 (5)	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		Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Stock Options (right to buy)	\$12.77	5/4/2018		M		930 (1)	10/27/2013	10/27/2019	Common Stock	930 (1)	\$0.00	0	D	
Stock Options (right to buy)	\$15.65	5/4/2018		M		3938 (1)	2/16/2014	2/16/2020	Common Stock	3938 (1)	\$0.00	0	D	
Stock Options (right to buy)	\$16.25	5/4/2018		M		2361 (1)	4/20/2014	4/20/2020	Common Stock	2361 (1)	\$0.00	0	D	
Stock Option (right to buy)	\$14.52	5/4/2018		M		3938 (1)	2/15/2015	2/15/2021	Common Stock	3938 (1)	\$0.00	0	D	
Stock Option (right to buy)	\$12.44	5/4/2018		M		7876 (1)	7/22/2015	7/22/2021	Common Stock	7876 (1)	\$0.00	0	D	
Stock Option (right to buy)	\$9.51	5/4/2018		M		11813 (1)	10/26/2015	10/26/2021	Common Stock	11813 (1)	\$0.00	0	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				
Stock Option (right to buy)	\$11.02	5/4/2018		M			8500 (1)	1/3/2013	1/3/2022	Common Stock	8500 (1)	\$0.00	0	D	
Stock Option (right to buy)	\$18.77	5/4/2018		M			13171 (1)	10/1/2017	1/1/2024	Common Stock	13171 (1)	\$0.00	43429	D	
Stock Options (right to buy)	\$14.21	5/4/2018		M			3013 (1)	4/28/2015	4/28/2021	Common Stock	3013 (1)	\$0.00	0	D	

Explanation of Responses:

- (1) Shares exercised and sold in accordance with 10b5-1 trading plan.
- (2) The price reported in Column 4 is an average price. These shares sold in multiple transactions at prices ranging from \$60.78 to \$61.71. The reporting person undertakes to provide to Advanced Energy, any security holder of Advanced Energy, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.
- (3) The price reported in Column 4 is an average price. These shares sold in multiple transactions at prices ranging from \$61.85 to \$62.85. The reporting person undertakes to provide to Advanced Energy, any security holder of Advanced Energy, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.
- (4) The price reported in Column 4 is an average price. These shares sold in multiple transactions at prices ranging from \$62.86 to \$63.13. The reporting person undertakes to provide to Advanced Energy, any security holder of Advanced Energy, or the staff of the Securities and Exchange Commission, upon request, full information regarding the number of shares sold at each separate price within the ranges set forth in this footnote.
- (5) Represents 45,388 shares of Restricted Stock Units and 95,611 shares of common stock.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
WASSERMAN YUVAL 1625 SHARP POINT DRIVE FORT COLLINS, CO 80525	X		President & CEO	

Signatures

/s/ Thomas O. McGimpsey (Attorney-in-Fact)

5/8/2018

-- 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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