

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

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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* <b>WASSERMAN YUVAL</b>			2. Issuer Name and Ticker or Trading Symbol <b>ADVANCED ENERGY INDUSTRIES INC [ AEIS ]</b>			5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) <b>President &amp; CEO</b>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (Month/Day/Year) <b>02/02/2018</b>			6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person		
1625 SHARP POINT DRIVE			4. If Amendment, Date of Original Filed (Month/Day/Year)					
(Street) <b>FORT COLLINS CO 80525</b>								
(City) (State) (Zip)								

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

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction 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	02/02/2018		F		3,227 <sup>(1)</sup>	D	\$69.69	116,363	D	
Common Stock	02/02/2018		A		20,669 <sup>(2)</sup>	A	\$0.00	137,032	D	
Common Stock	02/05/2018		F		6,739 <sup>(1)</sup>	D	\$66	130,293 <sup>(3)</sup>	D	

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

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction 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 (Month/Day/Year)		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: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
Performance Units	\$0.00	02/02/2018		A	V	41,339 <sup>(4)</sup>		(4)	(4)	Common Stock	41,339	\$0.00	41,339	D	

**Explanation of Responses:**

- Payment of tax liability by withholding securities incident to vesting of restricted stock units.
- The restricted stock units granted 2/2/2018 under the Company's 2018 Long Term Incentive Plan (LTI Plan) will vest in three equal installments beginning on the first anniversary of the grant date.
- Represents 87,399 shares of Restricted Stock Units and 42,894 Performance Stock Units.
- These performance share awards were issued under the 2018 LTI Plan at 200% of target and have a 3-year vest period and will vest in all or in part upon achievement of performance metrics. Any awards that have not been vested and released at the end of the 3 year period will be cancelled.

**Remarks:**

/s/ Thomas O. McGimpsey      02/06/2018  
 (Attorney-in-Fact)

\*\* 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 Number.