

# FORM 4

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

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

**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)		
<b>Donaghey John</b>			<b>ADVANCED ENERGY INDUSTRIES INC [ AEIS ]</b>			<input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <b>EVP, Global Sales</b>		
(Last)	(First)	(Middle)	3. Date of Earliest Transaction (MM/DD/YYYY)					
<b>1595 WYNKOOP STREET, SUITE 800</b>			<b>3/1/2024</b>					
(Street)			4. If Amendment, Date Original Filed (MM/DD/YYYY)			6. Individual or Joint/Group Filing (Check Applicable Line)		
<b>DENVER, CO 80202</b>						<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	3/1/2024		D		876	A	(1)	12,465	D		
Common Stock	3/1/2024		F		348	(2)	D	\$101.2	12,117	(3)	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				
Restricted Stock Units	\$0	3/1/2024		A		7,837		(4)	(4)	Common Stock	7,837	\$0	7,837	D	
Performance Units	\$0	3/1/2024		A	V	7,837		(5)	(5)	Common Stock	7,837	\$0	7,837	D	
Phantom Stock	(6)	3/1/2024		A		876		(6)	(6)	Common Stock	876	(1)	876	D	

**Explanation of Responses:**

- In connection with the 03/01/2024 vesting of previously granted restricted stock units, the reporting person's receipt of 876 shares of common stock was deferred pursuant to the reporting person's election under the Company's deferred compensation plan (the "Plan"), resulting in the reporting person's receipt instead of 876 shares of phantom stock.
- Payment of tax liability by withholding securities incident to vesting of restricted stock units.
- Represents 7,397 shares of unvested restricted units and 4,720 shares of common stock.
- Employee restricted stock units granted 3/1/2024 under the Company's 2024 Long-Term Incentive Plan ("2024 LTI Plan"), which will vest in 3 equal installments beginning on the first anniversary of the grant date.
- These performance share awards were issued pursuant to the 2024 LTI Plan at 100% of target, 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 canceled.
- Each share of phantom stock represents a right to receive one share of common stock or the cash value thereof. Shares of phantom stock become payable in accordance with the reporting person's distribution elections made pursuant to the Plan or upon the reporting person's termination of service, death, or

disability. Subject to certain timing restrictions, the reporting person may transfer some or all of the shares of phantom stock into alternative investments under the terms of the Plan.

### Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
<b>Donaghey John</b> <b>1595 WYNKOOP STREET, SUITE 800</b> <b>DENVER, CO 80202</b>			<b>EVP, Global Sales</b>	

### Signatures

/s/ Elizabeth K. Vonne - Attorney-in-Fact

3/5/2024

\*\*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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