FORM 4

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

OMB APPROVAL

3235-028 OMB Number STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP Check this box if no longer subject to Estimated average burden Section 16. Form 4 or Form 5 obligations may continue. See hours per response: 0.5 Instruction 1(b) Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940 2. Issuer Name and Ticker or Trading Symbol 5. Relationship of Reporting Person(s) to Issuer 1. Name and Address of Reporting Person MKS INSTRUMENTS INC [MKSI] (Check all applicable) Burke Kathleen Flaherty Director 10% Owner Officer (give title Other (specify 3. Date of Earliest Transaction (Month/Dav/Year) Х below) below) (Middle) (Last) (First) 02/15/2024 EVP, GC & Secretary C/O MKS INSTRUMENTS, INC. 2 TECH DRIVE, SUITE 201 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) Form filed by One Reporting Person х Form filed by More than One Reporting Person (Street) ANDOVER 01810 MA Rule 10b5-1(c) Transaction Indication 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. (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5) 5. Amount of 2. Transaction 2A Deemed 7. Nature of 1. Title of Security (Instr. 3) 6. Ownership Execution Date, if any (Month/Day/Year) Securities Beneficially Owned Form: Direct (D) or Indirect Transaction Indirect Beneficial (Month/Day/Year) Code (Instr. 8) Following Reported (I) (Instr. 4) Ownership Transaction(s) (Instr. 4) (A) or (D) (Instr. 3 and 4) Code v Amount Price Common Stock 02/15/2024 М 2.032.561 44,896.241 D A 02/15/2024 м 1.016.78 45,913,021 D Common Stock Α Common Stock 02/15/2024 М 48,200.021 D 2.287 Α М (1) 49.845.021 Common Stock 02/15/2024 Α D 1.645 Common Stock 02/15/2024 М 3,608 Α (1) 53,453.021 D Common Stock 02/15/2024 М 1.869 A 55.322.021 D 02/15/2024 **F**(2) \$122.15 50,410,021 D Common Stock 4 912 D Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 1. Title of 3. Transaction 3A. Deemed 5. Number of 6. Date Exercisable and 7. Title and Amount of 8. Price of 9. Number of 10. 11. Nature 2. S. Number of Derivative Securities Acquired (A) or Derivative Security (Instr. 3) Conversion or Exercise Price of Derivative Security (Instr. 5) Expiration Date (Month/Day/Year) Securities Underlying Derivative Security Date Execution Date Transaction derivative Securities Ownershin of Indirect (Month/Dav/Year if any (Month/Day/Year) Code (Instr. Form: Direct (D) Beneficial Disposed of (D) (Instr. 3, 4 and 5) 8) (Instr. 3 and 4) Beneficially Ownership Derivative Security Owned or Indirect (I) (Instr. 4) (Instr. 4) Following Amount or Reported Transaction(s) Expiration Number of Date Exercisab Cod v (A) (D) Dat Titlo Shares (Instr. 4) Restricted Commoi (1) (3) (3) (1) 02/15/2024 A 4,945.499 4 945 499 32,292.267 D Stock Unit Stock Restricted Common 02/15/2024 (4) (4) 2,032.561 (1) 30,259.706 Μ 2 032 56 D Stock Uni Stock Restricted Commoi 02/15/2024 1 016 78 (5) (5) 1,016.78 (1) 29 242 926 Μ D Stock Unit Stock Restricted Common (1) (6) (1) 02/15/2024 м 2 287 (6) 2.287 26 955 926 D Stock Unit Stock Restricted Common (7) (7) (1) 02/15/2024 М 1,645 1.645 25,310.926 D Stock Unit Stock Restricted Stock Unit Commo (8) (8) (1) 02/15/2024 М 3,608 3.608 21,702.926 D Stock Restricted Common (1)02/15/2024 М 1,869 (9)(9)(1)19.833.926 D 1.869 Stock Unit Stock

Explanation of Responses:

1. Each restricted stock unit (RSU) represents the contingent right to receive one share of common stock of MKS Instruments, Inc

2. These shares were withheld by MKS Instruments, Inc. to satisfy the tax withholding obligations triggered by the vesting of RSUs and do not represent a discretionary trade by the reporting person.

3. These RSUs vest in three equal annual installments commencing on February 15, 2025, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

4. These RSUs were subject to performance criteria, the achievement of which was determined on January 21, 2022, and thereafter vest in three equal annual installments beginning on February 15, 2022, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

5. These RSUs vest in three equal annual installments commencing on February 15, 2022, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day. 6. These RSUs were subject to performance criteria, the achievement of which was determined on February 8, 2023, and thereafter vest in three equal annual installments beginning on February 15, 2023, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

7. These RSUs vest in three equal annual installments commencing on February 15, 2023, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day. 8. These RSUs were subject to performance criteria, the achievement of which was determined on February 5, 2024, and thereafter vest in three equal annual installments beginning on February 15, 2024, provided that if, in

any vesting year, February 15th is not a business day, such vesting shall occur on the next business day.

9. These RSUs vest in three equal annual installments commencing on February 15, 2024, provided that if, in any vesting year, February 15th is not a business day, such vesting shall occur on the next business day

/s/ M. Kathryn Rickards,	
attorney-in-fact	
** Signature of Reporting Person	

02/16/2024

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.

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.