1. Name and Address of Reporting Person
   Moloney Jacqueline F
   (Last) (First) (Middle)
   C/O MKS INSTRUMENTS, INC.
   2 TECH DRIVE, SUITE 201
   ANDOVER MA 01810

2. Issuer Name and Ticker or Trading Symbol
   MKS INSTRUMENTS INC [ MKSI ]

3. Date of Earliest Transaction (Month/Day/Year)
   12/01/2023

4. If Amendment, Date of Original Filed (Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer
   X Director 10% Owner
   Officer (give title below) Other (specify below)

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

<table>
<thead>
<tr>
<th>Title of Security</th>
<th>Transaction Date (Month/Day/Year)</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>12/01/2023</td>
<td>250</td>
<td>$82.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Title of Derivative Security</th>
<th>Transaction Date (Month/Day/Year)</th>
<th>Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th>
<th>Date Exercisable</th>
<th>Expiration Date</th>
<th>Title</th>
<th>Amount or Number of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Explanation of Responses:
1. This transaction was effected pursuant to a Rule 10b5-1 trading plan adopted by the reporting person on August 30, 2023.

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).


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.

/s/ M. Kathryn Rickards, attorney-in-fact
12/04/2023
** Signature of Reporting Person Date