

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 * Mears Robert J <small>(Last) (First) (Middle)</small> C/O ATOMERA, INC., 750 UNIVERSITY AVENUE, SUITE 280 <small>(Street)</small> LOS GATOS, CA 95032 <small>(City) (State) (Zip)</small>	2. Issuer Name and Ticker or Trading Symbol Atomera Inc [ATOM] 3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">9/1/2023</p>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input type="checkbox"/> Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) Chief Technology Officer 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person
4. If Amendment, Date Original Filed (MM/DD/YYYY)		

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	9/1/2023		S		758	(1)	D	\$6.28	125,111	D	
Common Stock	9/1/2023		S		1,419	(1)	D	\$6.28	123,692	D	
Common Stock	9/1/2023		S		373	(1)	D	\$6.28	123,319	D	
Common Stock	9/1/2023		S		179	(1)	D	\$6.28	123,140	D	
Comon Stock									2,666	I	by Spouse

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				

Explanation of Responses:

(1) Represents the number of shares sold by the Reporting Person to cover tax withholding obligations in connection with the vesting of restricted stockgrants that were previously reported. This sale is to satisfy mandatory non-discretionary tax withholding obligations by a "sell to cover" transaction.

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
Mears Robert J C/O ATOMERA, INC. 750 UNIVERSITY AVENUE, SUITE 280 LOS GATOS, CA 95032			Chief Technology Officer	

Signatures

/s/ Mindi Zimmer, as Attorney-in-Fact for Robert J. Mears

9/5/2023

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).

** 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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