



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

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

July 21, 2016

Via E-mail

Scott A. Bibaud
Chief Executive Officer
Atomera Incorporated
750 University Avenue, Suite 280
Los Gatos, California 95032

**Re: Atomera Incorporated
Registration Statement on Form S-1
Filed June 30, 2016
File No. 333-212353**

Dear Mr. Bibaud:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our February 11, 2016 letter.

Prospectus Cover Page

1. Please revise to indicate, if true, that your shares have only been approved for listing on the Nasdaq Capital Market since your present disclosure is anticipatory in nature.

Risk Factors, page 6

While the preliminary testing . . . , page 6

2. We note your response to comment 2. Please respond to that portion of the comment which asked you to tell us details about the test conditions and demonstrate how you used

objective, empirical evidence to reach the conclusion that group transistors using your technology “consistently demonstrated increased speed, reliability and energy efficiency.” Please also revise your disclosure to indicate any limitations of the tests and whether the tests demonstrated potential disadvantages of your technology, as appropriate.

3. We also note that your website, at <http://atomera.com/mst/>, contains claims regarding your technology such as “increased mobility and drive current” and “[g]ate leakage reduction of up to 50%,” along with links to studies purporting to support those claims. Please tell us the relationship between the statements and studies found on your website and your claims about performance in the prospectus. If appropriate, please provide us with copies of those studies.

Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 20

Financial Condition, page 21

4. We note your revised disclosure indicating that you anticipate requiring \$15 million in capital in addition to the offering’s proceeds to carry out your business plan. We also note that on page 6 your disclosure suggests that the proceeds from this offering will be sufficient to carry out your business plan. Please reconcile these two disclosures and revise to briefly describe the anticipated sources of additionally required capital, as appropriate.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement, please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and

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- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Dennis Hult at (202) 551-3618 or Lynn Dicker, Senior Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Caleb French at (202) 551-6947 or me at (202) 551-3528 with any other questions.

Sincerely,

/s/ Amanda Ravitz

Amanda Ravitz
Assistant Director
Office of Electronics and Machinery

cc: Daniel K. Donahue, Esq.