



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

DIVISION OF
CORPORATION FINANCE

February 8, 2007

Mail Stop 7010

By U.S. Mail and facsimile to (212) 930-9725

David Lee
Chief Executive Officer
BioSolar, Inc.
27936 Lost Canyon Road, Suite 202
Santa Clarita, California 91387

Re: BioSolar, Inc.
Amendment No. 2 to Registration Statement on Form SB-2
Filed January 30, 2007
File No. 333-138910

Dear Mr. Lee:

We have reviewed your filings and have the following comments. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Fee Table

1. We reference note 3 to the fee table. Please confirm to us that the number of shares being registered includes only shares issued under the Subscription Agreements dated May 26, 2006, and July 17, 2006.

Prospectus Summary, page 7
The Offering, page 7

2. We note statements under this heading that "up to 25,000,000 shares of common stock" were issued in the May 2006 transaction, that "up to 128,557,777 shares" are outstanding after the offering, and that this latter amount was "issued and outstanding" on November 13, 2006. Please revise these sections, and throughout your registration statement, to clarify whether the shares you are registering for resale have been issued to the individuals and entities listed in your selling stockholders table and to ensure consistent disclosure throughout the document.

Plan of Distribution, page 22

3. We note your statement that the “selling stockholders cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, the selling stockholders.” This statement indicates that your private placement may not have been complete at the time your registration statement was initially filed. Please provide us with a detailed legal analysis that explains how your private placements were exempt from registration under the Securities Act. If any of the shares being registered for resale were sold in the May and July Subscription Agreements, but have not been issued, your analysis should address each of the conditions required by the staff’s private-investment, public-equity (PIPE) position, as specified in paragraph 3S(b) to the Securities Act Sections portion of the March 1999 supplement to our Manual of Publicly Available Telephone Interpretations. Refer also to Section A.51 of our 1997 Manual of Publicly Available Telephone Interpretations. We may have additional comments upon review of your response.

You may contact Tricia Armelin, Staff Accountant, at (202) 551-3747 or John Cash, Accounting Branch Chief, at (202) 551-3768 if you have questions regarding comments on the financial statements and related matters. Please contact Matt Frankner, Staff Attorney, at (202) 551-3749 or me, at (202) 551-3767 with any other questions.

Sincerely,

Jennifer Hardy
Branch Chief

cc: Gregory Sichenzia
Eric A. Pinero
Sichenzia Ross Friedman Ference LLP
1065 Avenue of the Americas, 21st Floor
New York, New York 10018