



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

Mail Stop 4631

October 19, 2009

By U.S. Mail and Facsimile

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

Re: BioSolar, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Form 10-Q for the Fiscal Quarter Ended March 31, 2009
Form 10-Q for the Fiscal Quarter Ended June 30, 2009
File No. 333-138910

Dear Mr. Lee:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. 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.

Form 10-K for the Fiscal Year Ended December 31, 2008

Item 9A. Controls and Procedures, page 15

1. We note your statement that "our relevant officers have made conclusions as to the effectiveness of our disclosure controls and procedures at the reasonable assurance level"; however, it does not appear that you have provided the appropriate conclusion. In this regard, please amend your Form 10-K to provide the conclusions of your principal executive officer and principal financial officer as to the effectiveness of your disclosure controls and procedures as required by

Item 307 of Regulation S-K. We remind you that the entire “Item” being amended should be presented in your amendment to Form 10-K.

Exhibit 31 – Certification

2. We note that in the first paragraph of your certification, you have not correctly identified the registrant. In this regard, please amend your Form 10-K to provide the name of your company in paragraph 1, as required by Item 601(b)(31)(i) of Regulation S-K. Additionally, please omit the certifying individual’s title in the introduction sentence of the certification, since the officer should sign the certificate in a personal capacity.

Form 10-Q for the Fiscal Quarter Ended March 31, 2009

Form 10-Q for the Fiscal Quarter Ended June 30, 2009

Exhibit 31

3. We note that in your section 302 certification:
 - the introduction sentence contains the certifying individual’s title; however, this is not appropriate as the officer should sign the certificate in a personal capacity;
 - paragraphs 3, 4 and 5 reference the term “small business issuer” and should be replaced with the term “registrant”; and
 - you have omitted the required language in paragraph 4 and 4(b) referring to internal control over financial reporting.

In this regard, please amend your Form 10-Q for each of the fiscal quarters ended March 31, 2009 and June 30, 2009 to provide your certifications using the exact language as provided in Item 601(b)(31)(i) of Regulation S-K.

* * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please furnish your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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.

Mr. David Lee
BioSolar, Inc.
October 19, 2009
Page 3

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Tricia Armelin, Staff Accountant, at (202) 551-3747 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief