

Mail Stop 4561

January 7, 2010

Mr. Keith A. Jones  
Chief Financial Officer and Vice President, Finance  
PDF Solutions, Inc.  
333 West San Carlos Street, Suite 700  
San Jose, CA 95110

**Re: PDF Solutions, Inc.  
Form 10-K for the Fiscal Year ended December 31, 2008  
Filed March 16, 2009  
Form 10-K/A for the Fiscal Year ended December 31, 2008  
Filed April 30, 2009  
Form 10-Q for the Quarterly Period ended September 30, 2009  
Filed November 9, 2009  
File No. 000-31311**

Dear Mr. Jones:

We have reviewed your response letter dated December 11, 2009, in connection with the above-referenced filings and have the following comments. If indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may raise additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated November 30, 2009.

General

1. We note that your response to prior comment 7 as filed on EGDAR appears to be missing your complete response to our comment. Please file the complete response to prior comment 7 in your next response letter.

Form 10-K/A filed on April 30, 2009

Part III

Item 11. Executive Compensation

Performance Bonuses, page 9

2. In response to prior comment 6, you reference your disclosure that at the end of each fiscal year, the Compensation Committee assesses the company's performance for the fiscal year, as a general matter and as compared to the financial goals established by the Board, and decides whether to fund a performance bonus pool, and if so, the size of such pool. However, for neither fiscal 2008 nor fiscal 2007 have you provided a discussion of what such company targets were, nor you have provided how achievement relative to such targeted corporate performance goals translated into your decision to fund, or not fund, a bonus pool, and if so, the size of your bonus pool. Please disclose the applicable corporate performance targets. See Item 402(b)(2)(v) of Regulation S-K.
3. If you believe disclosing the targets would result in competitive harm such that the targets could be excluded properly under Instruction 4 to Item 402(b) of Regulation S-K, please provide on a supplemental basis a detailed explanation supporting your conclusion. If disclosure of quantitative or qualitative performance-related factors would cause competitive harm, you are required to discuss how difficult it will be for you to achieve the target levels or other factors. See Instruction 4 to Item 402(b) of Regulation S-K.
4. As part of your review of 2007 performance, in early 2008, after deciding to fund a bonus pool, you disclose that you approved bonuses ranging from \$10,000 to \$17,000 to Mr. Jones, Mr. Joseph, Mr. Hartring and Mr. Michaels after you assessed their individual performances. To the extent your compensation is based in any part on individual performance, clearly describe the elements of individual performance for each named executive officer. See Item 402(b)(2)(vii) of Regulation S-K.

Form 10-Q for the Quarterly Period ended September 30, 2009

Comparison of the Three Months Ended September 30, 2009 and 2008, page 20

5. We have reviewed your response to our prior comment number 7. Although you note in your response that a comparison to the three and nine months ended September 30, 2008 is more appropriate as it reflects the operating trends in light of the current economic climate, your response also highlights several current economic conditions that are not addressed in your filing that would appear to

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provide your readers with a better understanding of your gainshare performance incentives revenue. For example, your filing does not identify that one of the reasons for the increase in wafer starts is due to significant inventory shortages at manufacturers. Tell us how you have considered providing more of the information included in your response in your filing. Refer to Section III.B.1 of SEC Release 33-8350.

\* \* \* \* \*

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please submit all correspondence and supplemental materials on EDGAR as required by Rule 101 of Regulation S-T. If you amend your filing(s), you may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter that keys your response to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing any amendment and your response to our comments.

You may contact Ryan Rohn, Staff Accountant, at (202) 551-3739 if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Kevin Dougherty, Staff Attorney, at (202) 551-3271 or Mark Shuman, Legal Branch Chief, at (202) 551-3462. If you need further assistance, you may contact me at (202) 551-3730.

Sincerely,

Stephen Krikorian  
Accounting Branch Chief