

Mail Stop 4561

January 29, 2010

Momoko Beran  
Chief Financial Officer  
Simulations Plus, Inc.  
42505 Tenth Street West  
Lancaster, CA 93534-7059

**Re: Simulations Plus, Inc.  
Form 10-K for Fiscal Year Ended August 31, 2009  
Form 10-Q for Fiscal Quarter Ended November 30, 2009  
File No. 001-32046**

Dear Ms. Beran:

We have reviewed your response letter dated January 14, 2010. If 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 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. References to prior comments in this letter relate to comments in our letter dated December 23, 2009.

Form 10-K for Fiscal Year Ended August 31, 2009

Part III, page 23

General

1. We note that you have incorporated by reference information from your Definitive Proxy Statement on Schedule 14A, which was filed January 5, 2010, more than 120 days after your fiscal year end. Please note that information required by Part III of Form 10-K may be incorporated by reference from your definitive proxy statement if it is filed within 120 days after the end of your fiscal year. Refer to General Instruction G(3) of Form 10-K. As such, please amend your Form 10-K to include the information required by Part III.

Item 11 – Executive Compensation (Incorporated by Reference from Definitive Proxy Statement on Schedule 14A, filed January 5, 2010)

2. We note that grants of plan-based awards were made during the fiscal year 2009 according to your table on page 14. In your future filings, please disclose, in tabular format, all equity compensation plans approved and not approved by security holders, as required by Item 201(d) of Regulation S-K.

Director Compensation, page 19

3. In your future filings, please provide the disclosure required by Item 402(r) of Regulation S-K in the appropriate tabular format, relating to the compensation of your directors.

Item 13 – Certain Relationships and Related Transactions (Incorporated by Reference from Definitive Proxy Statement on Schedule 14A, filed January 5, 2010)

4. We note that you have incorporated by reference the information required by this Item from your definitive proxy statement; however, you have not disclosed in the definitive proxy statement any reportable transactions with related persons since the beginning of your last fiscal year. If no related party transactions occurred during this period, please provide us with a representation to this effect and confirm that you will provide the disclosure required pursuant to paragraph (d) of Item 404 of Regulation S-K in future filings.

Part IV

Item 15 – Exhibits and Financial Statement Schedules, page 23

5. In your response to prior comment 9, you indicate that the contracts made with two customers that accounted for 13% each of net sales, a third customer that accounted for 12% of net sales of Simulations Plus, and the government agency that accounted for 21% of net sales for Words+, were all made in the ordinary course of business. Given that these customers accounted for more than 10% of your net sales, tell us what consideration you have given to whether you are substantially dependent on these contracts, and therefore are required to file the contracts as exhibits to your Form 10-K. Refer to Item 601(b)(10)(ii)(B) of Regulation S-K.

Form 10-Q for Fiscal Quarter Ended November 30, 2009

Item 4. Controls and Procedures, page 23

6. Your presentation of the conclusions of your principal executive officer and principal financial officer as to the effectiveness of your disclosure controls and procedures continues not to conform with Rule 13a-15, and continues not to speak as of the end of the period covered by the report. See prior comment 3. Confirm that these officers determined that your disclosure controls and procedures, as defined in Rule 13a-15(e), were effective as of November 30, 2009, and confirm that you will present the conclusions of these officers correctly in future filings.

Exhibits 31.1 and 31.2

7. The language of the certifications required by Rule 13a-14(a) may not be altered in any manner from the form appearing in Item 601(b)(31)(i) of Regulation S-K. In this regard, we note that you have included additional language in the introductory paragraph of your certifications and have not included the entire language required by paragraph 5, which specifies that the evaluation is based on the internal control over financial reporting. Please confirm that in future filings you will not alter the form of the certifications in any manner from that appearing in Item 601(b)(31)(i) of Regulation S-K.

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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 Stephani Bouvet at (202) 551-3545 if you have any questions regarding the above comments. If you need further assistance, you may contact me at (202) 551-3503.

Sincerely,

David L. Orlic  
Staff Attorney

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