



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

Division of Corporation  
Finance

Mail Stop 4561

March 10, 2010

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

**Re: Simulations Plus, Inc.  
Form 10-K/A for Fiscal Year Ended August 31, 2009  
Filed March 1, 2010  
File No. 001-32046**

Dear Ms. Beran:

We have reviewed the above-referenced filing. 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 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 supplemental information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

General

1. We note you filed a Form S-8 registration statement on May 11, 2007 that incorporated by reference your Form 10-K for the fiscal year ended August 31, 2009. Please tell us whether any securities remained unsold under this registration statement as of the filing date of this Form 10-K. If securities remained unsold at that time, please file the consent of your auditor for the reports on fiscal years ended August 31, 2009, dated November 24, 2009.
2. If securities remain unsold on the Form S-8 filed on May 11, 2007, please provide us with your analysis as to any implications under the Securities Act of 1933 of the absence of auditor's consents in your recent annual reports on Form 10-K, and the filing of the information required by Part III of Form 10-K subsequent to 120 days after the fiscal year end. Similarly, please tell us how any conclusions in this regard impacted the determination as to the effectiveness of your disclosure controls and procedures.

Momoko Beran  
Simulations Plus, Inc.  
March 10, 2010  
Page 2

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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 Tamara Tangen, Staff Accountant, at (202) 551-3443, or in her absence, Stephen Krikorian, Accounting Branch Chief, at (202) 551-3488, if you have any questions regarding comments on the financial statements and related matters. Please address questions regarding all other comments to Stephani Bouvet at (202) 551-3545. If you need further assistance, you may contact me at (202) 551-3503.

Sincerely,

David L. Orlic  
Staff Attorney

cc: Via facsimile to: (858) 523-4305  
Dennis J. Doucette, Esq.  
Luce Forward