

Room 4561

December 18, 2007

Mr. Vincent E. Estrada  
Senior Vice President and  
Chief Financial Officer  
Visicu, Inc.  
217 East Redwood Street  
Suite 1900  
Baltimore, MD 21202

**Re: Visicu, Inc.**  
**Form 10-K for the Fiscal Year Ended December 31, 2006**  
**Filed March 13, 2007**  
**File No. 000-51865**

Dear Mr. Estrada:

We have reviewed the above referenced filing and have the following comments. Please note that we have limited our review to the matters addressed in the comments below. 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.

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, 2006

Management's Discussion and Analysis of Financial Condition and Results of Operations

Results of Operations, page 35

1. In the discussion of your results of operations, you refer to various factors that have impacted revenue without quantifying the impact of each factor. For example, you disclose that the changes in revenue were due to an increase in the

number of activated customers and additional activated beds by existing recurring customers, but you give no indication as to the relative impact of each factor. Please explain to us how you considered Section III.D of SEC Release No. 33-6835.

2. We note several references to the number of activated customers and activated beds throughout your disclosures. Please describe to us the extent to which you use activated customers or activated beds as a key indicator in managing your business and indicate whether you believe that these metrics contribute meaningfully to understanding and evaluating your company. In addition, tell us what consideration you gave to disclosing these metrics in your MD&A. See Section III.B.1 of SEC Release No. 33-8350.

### Financial Statements

#### Statements of Operations, page 44

3. We note that a significant portion of your revenue is recognized ratably due to the lack of VSOE of PCS services. Please explain to us how you allocate revenue from these arrangements to license and services revenue.

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 responses 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 responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

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 the filing;
- 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

Mr. Vincent E. Estrada  
Visicu, Inc.  
December 18, 2007  
Page 3

- 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 filing or in response to our comments on your filing.

You may contact Christine Davis, Senior Staff Accountant at (202) 551-3408 or me at (202) 551-3451 if you have questions regarding these comments.

Sincerely,

Mark Kronforst  
Accounting Branch Chief