



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

DIVISION OF
CORPORATION FINANCE

July 29, 2010

Mr. James Guerra
Chief Operating Officer and Chief Financial Officer
Lightbridge Corporation
1600 Tysons Boulevard, Suite 550
McLean, VA 22102

**Re: Lightbridge Corporation
Form 10-K for the Year Ended December 31, 2009
File No. 1-34487**

Dear Mr. Guerra:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter via EDGAR within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2009

Consolidated Balance Sheets, page F-3

1. We see your presentation of deferred stock compensation and common stock reserved for issuance in both your December 31, 2009, consolidated balance sheets as well as the related consolidated statements of changes in stockholders' equity. We note that ASC 718-10-25-2 requires compensation costs to be recognized in the financial statements as services are provided by employees and does not permit those costs to be recognized as deferred compensation on the balance sheet before services are provided. Also refer to the transition guidance in paragraph 74 of Statement 123R. Revise your disclosures in future filings as necessary based on our comment and provide us with your proposed disclosures or tell us why you believe your current presentation is appropriate.

Note 9. Stockholders' Equity, page F-15

2. Please tell us how you account for share-based compensation granted to your advisory board members and consultants, specifically stating how you determined whether these individuals were employees subject to the provisions of ASC 718 or non-employees subject to ASC 505-50.
3. Please revise in future filings to include all disclosures required by ASC 718-10-50 for each type of award granted (e.g., restricted stock and stock options), including but not limited to the following:
 - the total compensation cost related to nonvested awards not yet recognized and the weighted-average period over which it is expected to be recognized;
 - a discussion of the methods used to estimate expected term and expected volatility in your calculation of the fair value of share-based compensation awards; and
 - the number and weighted average grant-date fair value of restricted stock that was nonvested at the beginning of the year, nonvested at the end of the year, and those that during the year were granted, vested, and forfeited.

Provide us with your proposed disclosures.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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
- 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.

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You may contact Jonathan Wiggins at (202) 551-3694 or me at (202) 551-3486 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Daniel L. Gordon
Branch Chief