

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

December 2, 2011

Via E-mail

Mr. William F. Lacey Executive Vice President and Chief Financial Officer GSE Holding, Inc. 19103 Gundle Road Houston, TX 77073

Re: GSE Holding, Inc.

Amendment No. 3 to Registration Statement on Form S-1

Filed November 23, 2011 File No. 333-175475

Dear Mr. Lacey:

We have reviewed your registration statement and have the following comments.

Prospectus Cover Page

1. We note that you have named additional underwriters on the prospectus cover page. Please confirm that all the underwriters named on the prospectus cover page play the role of lead or managing underwriters. Otherwise, please revise the prospectus cover page to identify only the lead or managing underwriters. Please refer to Item 501(b)(8) of Regulation S-K.

Capitalization, page 39

2. For component (c) of adjustment (1), please disclose why the issuance of shares of common stock pursuant to bonus letter agreements is resulting in the decrease of cash as well as how you determined the amount of cash that will be reduced. Please also address this comment in your pro forma financial statements.

Dilution, page 41

3. In the penultimate sentence of the third paragraph, you state that new investors will experience immediate dilution in pro forma net tangible book value per share of \$11.82. However, in the table immediately following the third paragraph, you state that dilution per share to new investors will be \$18.37. Please revise your dilution and risk factor disclosures to reconcile these figures and tell us how you calculated the \$18.37 value. In addition, in the last row of the table, there is a footnote reference, but there does not appear to be a corresponding footnote reference in the text below to clarify to which disclosure the footnote relates. Please correct this reference.

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<u>Unaudited Pro Forma Condensed Consolidated Financial Statements, page 43</u>

- 4. For adjustment 3(c), please also disclose whether you have reduced the deferred tax asset amount with a valuation allowance. If so, disclose the gross amount of the deferred tax asset and the related valuation allowance. If not, please address your consideration of whether a valuation allowance needs to be recorded.
- 5. For adjustment 4, please provide a reconciliation between your historical and pro forma weighted average common shares outstanding which clearly shows the impact of each of the factors you listed.

Critical Accounting Policies and Estimates

Stock-Based Compensation, page 84

6. The estimated fair market value of your common stock increased from \$4.76 per share at January 17, 2011 to an estimated IPO range of \$13 to \$15, which represents an increase in value of 173% to 215% in a ten month period. Your disclosures do not adequately address the factors that contributed to such a significant increase. You believe that the primary reason for the increase is due to continued improvement in your financial performance from 2010 to 2011. Please help us better understand how the improvement impacted the fair market value of your common stock as well as the estimated impact of this improvement on the value. For example, please tell us if your actual results subsequent to the valuation performed for your January issuances were better than what was reflected in preparing your valuation. If so, please help us understand the differences, the reasons for the differences, and the estimated impact of these differences. Please tell us if there are any other specific factors that resulted in the increase in value. For these additional factors, please also provide us with a detailed explanation of each of these factors as well as show the estimated impact of each factor on the fair market value of your common stock.

Financial Statements

Notes to the Financial Statements

Note 19. Subsequent Events, page F-41

7. Please disclose the date through which subsequent events were evaluated as well as whether that date is the date the financial statements were issued or the date the financial statements were available to be issued. Refer to ASC 855-10-50-1.

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You may contact Nudrat Salik at (202) 551-3692 or Rufus Decker at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Dickerson at (202) 551-3749 or Dietrich King at (202) 551-3338 with any other questions.

Sincerely,

/s/ Dietrich King for

Pamela Long Assistant Director

cc: Theodore A. Peto Kirkland & Ellis LLP