

GSE SYSTEMS INC  
Form 10-Q  
November 10, 2008

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

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Quarterly Period Ended September 30, 2008.

or

Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the Transition Period from     to     .

001-14785  
(Commission File Number)

GSE SYSTEMS, INC.  
(Exact name of registrant as specified in its charter)

Delaware  
(State of  
incorporation)

52-1868008  
( I . R . S .  
E m p l o y e r  
I d e n t i f i c a t i o n  
N u m b e r )

1332 Londontown Blvd., Suite 200, Sykesville, MD 21784  
(Address of principal executive office and zip code)

Registrant's telephone number, including area code: (410) 970-7800

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Sections 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "accelerated filer", "large accelerated filer" and "smaller reporting



GSE SYSTEMS, INC.

QUARTERLY REPORT ON FORM 10-Q

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## PART I - FINANCIAL INFORMATION

## Item 1. Financial Statements

GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED BALANCE SHEETS  
(in thousands, except share data)

|   | Unaudited<br>September<br>30, 2008 | December<br>31, 2007 |
|---|------------------------------------|----------------------|
| <b>ASSETS</b>   |                                    |                      |
| Current assets:   |                                    |                      |
| Cash and cash equivalents   | \$ 7,513                           | \$ 8,172             |
| Restricted cash   | 2,521                              | 2,228                |
| Contract receivables  | 11,883                             | 10,721               |
| Prepaid expenses and other current assets   | 1,019                              | 894                  |
| Total current assets  | 22,936                             | 22,015               |
| Equipment and leasehold improvements, net   | 1,162                              | 880                  |
| Software development costs, net   | 1,505                              | 1,170                |
| Goodwill  | 1,739                              | 1,739                |
| Long-term restricted cash   | 1,990                              | 1,925                |
| Other assets  | 1,098                              | 635                  |
| Total assets  | \$ 30,430                          | \$ 28,364            |
| <b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>   |                                    |                      |
| Current liabilities:  |                                    |                      |
| Accounts payable  | \$ 1,723                           | \$ 1,533             |
| Accrued expenses  | 733                                | 1,061                |
| Accrued compensation and payroll taxes  | 1,284                              | 1,613                |
| Billings in excess of revenue earned  | 3,671                              | 2,270                |
| Accrued warranty  | 961                                | 724                  |
| Other current liabilities   | 273                                | 103                  |
| Total current liabilities   | 8,645                              | 7,304                |
| Other liabilities   | 733                                | 695                  |
| Total liabilities   | 9,378                              | 7,999                |
| Commitments and contingencies   |                                    |                      |
| Stockholders' equity:   |                                    |                      |
| Preferred stock \$.01 par value, 2,000,000 shares authorized,<br>shares issued and outstanding none in 2008 and 2007                      | -                                  | -                    |
| Common stock \$.01 par value, 30,000,000 shares authorized,<br>shares issued and outstanding 15,963,958 in 2008 and<br>15,508,014 in 2007 | 160                                | 155                  |
| Additional paid-in capital  | 50,217                             | 49,225               |
| Accumulated deficit   | (28,261)                           | (28,128)             |
| Accumulated other comprehensive loss  | (1,064)                            | (887)                |

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|  |           |           |
|--|-----------|-----------|
| Total stockholders' equity                 | 21,052    | 20,365    |
| Total liabilities and stockholders' equity | \$ 30,430 | \$ 28,364 |

The accompanying notes are an integral part of these consolidated financial statements.

GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS  
(in thousands, except per share data)  
(Unaudited)

|   | Three months ended<br>September 30, |          | Nine months ended<br>September 30, |           |
|---|-------------------------------------|----------|------------------------------------|-----------|
|   | 2008                                | 2007     | 2008                               | 2007      |
| Contract revenue                                    | \$ 7,001                            | \$ 7,526 | \$ 20,639                          | \$ 23,769 |
| Cost of revenue                                     | 5,023                               | 5,150    | 14,889                             | 16,345    |
| Gross profit  | 1,978                               | 2,376    | 5,750                              | 7,424     |
| Operating expenses:                                 |                                     |          |                                    |           |
| Selling, general and administrative                 | 1,694                               | 1,813    | 5,585                              | 5,567     |
| Depreciation  | 114                                 | 59       | 317                                | 168       |
| Total operating expenses                            | 1,808                               | 1,872    | 5,902                              | 5,735     |
| Operating income (loss)                             | 170                                 | 504      | (152)                              | 1,689     |
| Interest income (expense), net                      | 42                                  | (62)     | 76                                 | (425)     |
| Other income (expense), net                         | 317                                 | (88)     | 193                                | (353)     |
| Income before income taxes                          | 529                                 | 354      | 117                                | 911       |
| Provision for income taxes                          | 99                                  | 51       | 250                                | 229       |
| Net income (loss)                                   | 430                                 | 303      | (133)                              | 682       |
| Preferred stock dividends                           | -                                   | -        | -                                  | (49)      |
| Net income (loss) attributed to common shareholders | \$ 430                              | \$ 303   | \$ (133)                           | \$ 633    |
| Basic income (loss) per common share                | \$ 0.03                             | \$ 0.02  | \$ (0.01)                          | \$ 0.05   |
| Diluted income (loss) per common share              | \$ 0.03                             | \$ 0.02  | \$ (0.01)                          | \$ 0.04   |

The accompanying notes are an integral part of these consolidated financial statements.

GSE SYSTEMS, INC. AND SUBSIDIARIES  
 CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)  
 (in thousands)  
 (Unaudited)

|   | Three months ended<br>September 30, |        | Nine months ended<br>September 30, |        |
|---|-------------------------------------|--------|------------------------------------|--------|
|   | 2008                                | 2007   | 2008                               | 2007   |
| Net income (loss)                       | \$ 430                              | \$ 303 | \$ (133)                           | \$ 682 |
| Foreign currency translation adjustment | (265)                               | 119    | (177)                              | 88     |
| Comprehensive income (loss)             | \$ 165                              | \$ 422 | \$ (310)                           | \$ 770 |

The accompanying notes are an integral part of these consolidated financial statements.



CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY  
(in thousands)  
(Unaudited)

|   | Preferred Stock |        | Common Stock |        | Additional Paid-in Capital | Accumulated Deficit | Accumulated Other Comprehensive Loss |           | Total |
|---|-----------------|--------|--------------|--------|----------------------------|---------------------|--------------------------------------|-----------|-------|
|   | Shares          | Amount | Shares       | Amount |                            |                     | Loss                                 | Total     |       |
| Balance, January 1, 2008  | -               | \$ -   | 15,508       | \$ 155 | \$ 49,225                  | \$ (28,128)         | \$ (887)                             | \$ 20,365 |       |
| Stock-based compensation expense  | -               | -      | -            | -      | 319                        | -                   | -                                    | 319       |       |
| Common stock issued for options exercised, net of 30,645 shares returned to GSE to pay for employee's income tax liabilities of \$251,000 | -               | -      | 194          | 2      | 29                         | -                   | -                                    | 31        |       |
| Common stock issued for services provided   | -               | -      | 13           | -      | 107                        | -                   | -                                    | 107       |       |
| Common stock issued for warrants exercised  | -               | -      | 249          | 3      | 537                        | -                   | -                                    | 540       |       |
| Foreign currency translation adjustment   | -               | -      | -            | -      | -                          | -                   | (177)                                | (177)     |       |
| Net loss  | -               | -      | -            | -      | -                          | (133)               | -                                    | (133)     |       |
| Balance, September 30, 2008   | -               | \$ -   | 15,964       | \$ 160 | \$ 50,217                  | \$ (28,261)         | \$ (1,064)                           | \$ 21,052 |       |

The accompanying notes are an integral part of these consolidated financial statements.



GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
(in thousands)  
(Unaudited)

|  | Nine months ended<br>September 30, |          |
|--|------------------------------------|----------|
|  | 2008                               | 2007     |
| Cash flows from operating activities:  |                                    |          |
| Net income (loss)  | \$ (133)                           | \$ 682   |
| Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities: |                                    |          |
| Depreciation   | 317                                | 168      |
| Capitalized software amortization  | 195                                | 252      |
| Amortization of deferred financing costs   | 124                                | 399      |
| Stock-based compensation expense   | 426                                | 430      |
| Elimination of profit on Emirates Simulation Academy, LLC contract                                 | 38                                 | 371      |
| Equity loss on investment in Emirates Simulation Academy, LLC                                      | 138                                | -        |
| Changes in assets and liabilities:   |                                    |          |
| Contract receivables   | (1,162)                            | (2,877)  |
| Prepaid expenses and other assets  | (340)                              | (522)    |
| Accounts payable, accrued compensation and accrued expenses  | (638)                              | (264)    |
| Billings in excess of revenues earned  | 1,401                              | 1,062    |
| Accrued warranty reserves  | 237                                | (98)     |
| Other liabilities  | 170                                | 155      |
| Net cash provided by (used in) operating activities  | 773                                | (242)    |
| Cash flows from investing activities:  |                                    |          |
| Investment in Emirates Simulation Academy, LLC   | (422)                              | (128)    |
| Capital expenditures   | (600)                              | (258)    |
| Capitalized software development costs   | (530)                              | (513)    |
| Restriction of cash as collateral under letters of credit or guarantees                            | (548)                              | (1,275)  |
| Release of cash as collateral under letters of credit  | 190                                | 63       |
| Net cash used in investing activities  | (1,910)                            | (2,111)  |
| Cash flows from financing activities:  |                                    |          |
| Proceeds from issuance of common stock due to the exercise of options and warrants                 | 571                                | 1,260    |
| Deferred financing costs   | (88)                               | -        |
| Decrease in borrowings under lines of credit   | -                                  | (2,155)  |
| Net proceeds from issuance of common stock and warrants  | -                                  | 9,235    |
| Tax benefit from option exercises  | -                                  | 41       |
| Payment of preferred stock dividends   | -                                  | (49)     |
| Payment of ManTech preferred stock dividends   | -                                  | (316)    |
| Net cash provided by financing activities  | 483                                | 8,016    |
| Effect of exchange rate changes on cash  | (5)                                | 15       |
| Net increase (decrease) in cash and cash equivalents   | (659)                              | 5,678    |
| Cash and cash equivalents at beginning of year   | 8,172                              | 1,073    |
| Cash and cash equivalents at end of period   | \$ 7,513                           | \$ 6,751 |

The accompanying notes are an integral part of these consolidated financial statements.

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GSE SYSTEMS, INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
For the Three and Nine Months ended September 30, 2008 and 2007  
(Unaudited)

1. Basis of Presentation and Revenue Recognition

Basis of Presentation

The consolidated financial statements included herein have been prepared by GSE Systems, Inc. (the “Company” or “GSE”) without independent audit. In the opinion of the Company's management, all adjustments and reclassifications of a normal and recurring nature necessary to present fairly the financial position, results of operations and cash flows for the periods presented have been made. Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) have been condensed or omitted. The results of operations for interim periods are not necessarily an indication of the results for the full year. These consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the period ended December 31, 2007 filed with the Securities and Exchange Commission on March 17, 2008.

The Company has only one reportable segment. The Company has a wide range of knowledge of simulation systems and the processes those systems are intended to control and model. The Company's knowledge is concentrated heavily in simulation technology and model development. The Company is primarily engaged in simulation for the power generation industry and the process industries. Contracts typically range from 12 months to three years.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements as well as reported amounts of revenues and expenses during the reporting period. The Company's most significant estimates relate to revenue recognition, capitalization of software development costs, and the recoverability of deferred tax assets. Actual results could differ from these estimates and those differences could be material.

Revenue Recognition

The majority of the Company's revenue is derived through the sale of uniquely designed systems containing hardware, software and other materials under fixed-price contracts. In accordance with Statement of Position 81-1, Accounting for Performance of Construction-Type and Certain Production-Type Contracts, the revenue under these fixed-price contracts is accounted for on the percentage-of-completion method. This methodology recognizes revenue and earnings as work progresses on the contract and is based on an estimate of the revenue and earnings earned to date, less amounts recognized in prior periods. The Company bases its estimate of the degree of completion of the contract by reviewing the relationship of costs incurred to date to the expected total costs that will be incurred on the project. Estimated contract earnings are reviewed and revised periodically as the work progresses, and the cumulative effect of any change in estimate is recognized in the period in which the change is identified. Estimated losses are charged against earnings in the period such losses are identified. The Company recognizes revenue arising from contract claims either as income or as an offset against a potential loss only when the amount of the claim can be estimated reliably and realization is probable and there is a legal basis of the claim. There were no claims outstanding as of September 30, 2008.

Uncertainties inherent in the performance of contracts include labor availability and productivity, material costs, change order scope and pricing, software modification and customer acceptance issues. The reliability of these cost estimates is critical to the Company's revenue recognition as a significant change in the estimates can cause the Company's revenue and related margins to change significantly from the amounts estimated in the early stages of the project.

As the Company recognizes revenue under the percentage-of-completion method, it provides an accrual for estimated future warranty costs based on historical and projected claims experience. The Company's long-term contracts generally provide for a one-year warranty on parts, labor and any bug fixes as it relates to software embedded in the systems.

The Company's system design contracts do not normally provide for "post customer support service" (PCS) in terms of software upgrades, software enhancements or telephone support. In order to obtain PCS, the customers must normally purchase a separate contract. Such PCS arrangements are generally for a one-year period renewable annually and include customer support, unspecified software upgrades, and maintenance releases. The Company recognizes revenue from these contracts ratably over the life of the agreements in accordance with Statement of Position 97-2, Software Revenue Recognition.

Revenue from the sale of software licenses which do not require significant modifications or customization for the Company's modeling tools is recognized when the license agreement is signed, the license fee is fixed and determinable, delivery has occurred, and collection is considered probable.

Revenue for contracts with multiple elements is recognized in accordance with Emerging Issues Task Force Issue 00-21, Accounting for Revenue Arrangements with Multiple Deliverables.

Revenue from certain consulting or training contracts is recognized on a time-and-material basis. For time-and-material type contracts, revenue is recognized based on hours incurred at a contracted labor rate plus expenses.

The following customers have provided more than 10% of the Company's revenue for the indicated period:

|                                   | Three months ended    |       | Nine months ended     |       |
|-----------------------------------|-----------------------|-------|-----------------------|-------|
|                                   | September 30,<br>2008 | 2007  | September 30,<br>2008 | 2007  |
| American Electric Power           | 13.1%                 | 0.3%  | 4.8%                  | 0.2%  |
| Emerson Process Management        | 12.8%                 | 9.5%  | 16.8%                 | 7.3%  |
| Emirates Simulation Academy, LLC  | 0.6%                  | 27.4% | 6.0%                  | 34.2% |
| Westinghouse Electric Company LLC | 10.6%                 | 0.7%  | 7.7%                  | 0.5%  |

Contract receivables unbilled totaled \$3.2 million and \$6.6 million as of September 30, 2008 and December 31, 2007, respectively. In October 2008, the Company invoiced \$993,000 of the unbilled amounts.

## 2. Basic and Diluted Income (Loss) Per Common Share

Basic income (loss) per share is based on the weighted average number of outstanding common shares for the period. Diluted income (loss) per share adjusts the weighted average shares outstanding for the potential dilution that could occur if stock options, warrants or convertible preferred stock were exercised or converted into common stock. The number of common shares and common share equivalents used in the determination of basic and diluted income (loss) per share were as follows:





| (in thousands, except for share amounts)  | Three months ended |            | Nine months ended |            |
|---|--------------------|------------|-------------------|------------|
|   | September 30,      |            | September 30,     |            |
|   | 2008               | 2007       | 2008              | 2007       |
| Numerator:  |                    |            |                   |            |
| Net income (loss)   | \$ 430             | \$ 303     | \$ (133)          | \$ 682     |
| Preferred stock dividends   | -                  | -          | -                 | (49)       |
| Net income (loss) attributed to common stockholders   | \$ 430             | \$ 303     | \$ (133)          | \$ 633     |
| Denominator:  |                    |            |                   |            |
| Weighted-average shares outstanding for basic earnings per share                                    | 15,920,908         | 14,943,189 | 15,683,442        | 12,568,108 |
| Effect of dilutive securities:  |                    |            |                   |            |
| Employee stock options, warrants, options outside the plan, and convertible preferred stock         | 792,308            | 1,451,543  | -                 | 1,935,392  |
| Adjusted weighted-average shares outstanding and assumed conversions for diluted earnings per share | 16,713,216         | 16,394,732 | 15,683,442        | 14,503,500 |
| Shares related to dilutive securities excluded because inclusion would be anti-dilutive             | 146,630            | 82,500     | 135,931           | 72,216     |

The net income for the nine months ended September 30, 2007 was decreased by preferred stock dividends of \$49,000 in calculating the per share amounts. Conversion of outstanding stock options and warrants was not assumed for the nine months ended September 30, 2008 because the impact was anti-dilutive.

### 3. Software Development Costs

Certain computer software development costs are capitalized in the accompanying consolidated balance sheets. Capitalization of computer software development costs begins upon the establishment of technological feasibility. Capitalization ceases and amortization of capitalized costs begins when the software product is commercially available for general release to customers. Amortization of capitalized computer software development costs is included in cost of revenue and is determined using the straight-line method over the remaining estimated economic life of the product, not to exceed five years.

Software development costs capitalized were \$137,000 and \$530,000 for the three and nine months ended September 30, 2008, respectively, and \$165,000 and \$513,000 for the three and nine months ended September 30, 2007. Total amortization expense was \$62,000 and \$195,000 for the three and nine months ended September 30, 2008, respectively, and \$81,000 and \$252,000 for the three and nine months ended September 30, 2007, respectively.

#### 4. Investment in Emirates Simulation Academy, LLC

On November 8, 2005, the Emirates Simulation Academy, LLC (“ESA”), headquartered in Abu Dhabi, United Arab Emirates, was formed to build and operate simulation training academies in the Arab Gulf Region. These simulation training centers will be designed to train and certify indigenous workers for deployment to critical infrastructure facilities including power plants, oil refineries, petro-chemical plants, desalination units and other industrial facilities. The members of the limited liability company include Al Qudra Holding PJSC of the United Arab Emirates (60% ownership), the Centre of Excellence for Applied Research and Training of the United Arab Emirates (30% ownership) and GSE (10% ownership). At September 30, 2008 and December 31, 2007, GSE’s investment in ESA totaled \$729,000 and \$445,000, respectively, and was included on the balance sheet in other assets. The Company accounts for its investment in ESA using the equity method. For the three and nine months ended September 30, 2008, the Company recognized a \$50,000 and \$138,000 equity loss, respectively, on its investment in ESA. The equity loss was recorded in other income (expense), net.

In January 2006, GSE received a \$15.1 million contract from ESA to supply five simulators and an integrated training program. A \$1.8 million change order was received from ESA in late 2007 increasing the total order value to \$16.9 million. For the three months ended September 30, 2008 and 2007, the Company recognized \$40,000 and \$2.1 million, respectively, of contract revenue on this project using the percentage-of-completion method, which accounted for 0.6% and 27.4% of the Company’s consolidated revenue, respectively. For the nine months ended September 30, 2008 and 2007, the Company recognized \$1.2 and \$8.1 million, respectively, of contract revenue on this project, which accounted for 6.0% and 34.2%, respectively, of the Company’s consolidated revenue. At September 30, 2008, no backlog remained on the ESA project. In accordance with the equity method, the Company has eliminated 10% of the profit from this contract as the training simulators are assets that will be recorded on the books of ESA, and the Company is thus required to eliminate its proportionate share of the profit included in the asset value. The profit elimination totaled \$0 and \$105,000 for the three months ended September 30, 2008 and September 30, 2007, respectively, and \$38,000 and \$371,000 for the nine months ended September 30, 2008 and September 30, 2007, respectively. The profit elimination has been recorded as an other expense in the income statement and as an other liability on the balance sheet. Once ESA begins to amortize the training simulators on their books, GSE will begin to amortize the other liability to other income.

At September 30, 2008 and December 31, 2007, the Company had trade receivables from ESA totaling \$2.7 million and \$1.0 million, respectively. In the second quarter 2008, the Company invoiced the final billing milestones of the contract; at December 31, 2007, the Company had an unbilled receivable of \$2.8 million. The \$2.7 million trade receivable due from ESA at September 30, 2008 is more than 120 days past due. The Company was informed by ESA that it is performing a financial and technical review of the entire ESA contract and that no additional payments will be made to the Company until their review is completed in November 2008. The Company has not provided a bad debt reserve against the \$2.7 million ESA receivable as it expects payment in full. Under the terms of the contract, the Company provided a \$2.1 million performance bond to ESA that will remain outstanding until the end of the warranty period which has been extended to February 28, 2009 from October 31, 2008. The Company has deposited \$1.2 million into a restricted, interest-bearing account at the Union National Bank (“UNB”) in the United Arab Emirates as a partial guarantee for the \$11.8 million credit facility that UNB has extended to ESA. The guarantee will be in place until the expiration of the ESA credit facility on December 31, 2014 or earlier if ESA pays down and terminates the credit facility.

#### 5. Stock-Based Compensation

The Company accounts for its stock-based compensation awards under SFAS No. 123R, Share-Based Payment, which requires companies to recognize compensation expense for all equity-based compensation awards issued to

employees, directors and non-employees that are expected to vest. Compensation cost is based on the fair value of awards as of the grant date. The Company recognized \$142,000 of pre-tax stock-based compensation expense for both the three months ended September 30, 2008 and 2007 under the fair value method in accordance with SFAS No. 123R and recognized \$426,000 and \$430,000 of pre-tax stock-based compensation expense for the nine months ended September 30, 2008 and 2007, respectively.

## 6. Long-term Debt

## Line of Credit

On March 28, 2008, the Company entered into two separate revolving line of credit agreements for two-year revolving lines of credit with Bank of America, N.A. (“BOA”), in an aggregate amount of up to \$5.0 million. The Company and its subsidiary, GSE Power Systems, Inc., are jointly and severally liable as co-borrowers. The credit facilities are collateralized by substantially all of the Company’s assets and enable the Company to borrow funds to support working capital needs and standby letters of credit. The first line of credit in the principal amount of up to \$3.5 million enables the Company to borrow funds up to 90% of eligible foreign accounts receivable, plus 75% of eligible unbilled foreign receivables and 100% of the cash collateral pledged to BOA on outstanding letters of credit. This line of credit is 90% guaranteed by the Export-Import Bank of the United States. The interest rate on this line of credit is based on the daily LIBOR rate plus 150 basis points, with interest only payments due monthly. The second line of credit in the principal amount of up to \$1.5 million enables the Company to borrow funds up to 80% of domestic accounts receivable and 30% of domestic unbilled receivables. The interest rate on this line of credit is based on the daily LIBOR rate plus 225 basis points, with interest only payments due monthly. The credit facilities require the Company to comply with certain financial ratios and preclude the Company from paying dividends and making acquisitions beyond certain limits without the bank’s consent. The Company’s available borrowing base under the two lines of credit was \$3.7 million at September 30, 2008, none of which had been utilized.

## 7. Product Warranty

As the Company recognizes revenue under the percentage-of-completion method, it provides an accrual for estimated future warranty costs based on historical experience and projected claims. The activity in the warranty account for the nine months ended September 30, 2008 is as follows:

(in thousands)

|                               |        |
|-------------------------------|--------|
| Balance at December 31, 2007  | \$ 724 |
| Warranty provision            | 569    |
| Warranty claims               | (332)  |
| Balance at September 30, 2008 | \$ 961 |

## 8. Common Stock

At a special shareholder’s meeting on December 13, 2007, the Company’s shareholders approved an amendment to the Company’s Certificate of Incorporation increasing GSE’s authorized common stock by 12 million shares to a total of 30 million shares. In addition, the shareholders approved an amendment to the Company’s 1995 Long-Term Incentive Plan (amended and restated September 25, 2007) (the “Plan”) which increased the number of shares available under the Plan by 1 million shares to a total of 3.5 million shares and extended the life of the Plan by an additional 10 years to June 30, 2018. The Company has reserved 1 million shares of the newly authorized common stock for issuance pursuant to the provisions of the Plan.

On June 22, 2007, the Company raised \$9.2 million, net of associated fees of \$768,000, through the sale of 1,666,667 shares (the "Shares") of its common stock, \$.01 par value per share, by means of a private placement to selected institutional investors. Each investor received a five-year warrant to purchase GSE common stock (the "Warrant Shares") equal to 10% of the shares of common stock that each investor purchased at an exercise price of \$6.00 per share (the "Warrants"). In aggregate, the Company issued Warrants to purchase a total of 166,667 shares of GSE common stock.

The Company filed its registration statement on Form S-3 with the Securities and Exchange Commission (the "Commission") in July 2007 covering the offer and sale, from time to time, of the Shares, the Warrant Shares and shares of common stock issuable upon exercise of warrants that may be issued as liquidated damages under the terms of a certain registration rights agreement entered into between the Company and the investors (the "Registration Rights Agreement") in connection with the private placement. The Registration Statement became effective on August 8, 2007 and, pursuant to the provisions of the Registration Rights Agreement, the Company is obligated to use commercially reasonable efforts to, after the date on which the Registration Statement became effective, cause the Registration Statement to remain continuously effective as to all Shares and Warrant Shares, other than for an aggregate of more than 30 consecutive trading days or for more than an aggregate of 60 trading days in any 12-month period. In the event of a default of the foregoing obligation, the Company will be required to issue to the investors, as liquidated damages, on the date the foregoing default occurs and each monthly anniversary thereafter, a number of warrants (on the same terms as the Warrants) equal to 2% of the number of Shares then held by such investor, not to exceed 10% of the total number of Shares then held by such investor, and thereafter cash, in an amount equal to 2% of the aggregate purchase price paid by the investors, not to exceed 30% of the aggregate purchase price paid by the investors.

At the date of issuance, the fair value of the Warrants was \$510,000 and the fair value of the Shares was \$9.5 million. The fair value of the Warrants and the Shares was determined by the use of the relative fair value method, in which the \$10.0 million gross proceeds was allocated based upon the fair values of the Warrants, as determined by using the Black-Scholes Model, and the Shares, as determined by the closing price of the common stock on the American Stock Exchange on the date the transaction was closed.

The Company paid the placement agent for the Shares and Warrants 6% of the gross proceeds received by the Company from the offering (\$600,000). In addition to the placement agent fee, the Company paid \$168,000 of other transaction fees related to the offering.

The proceeds were used to pay down the Company's line of credit and for other working capital purposes.

#### 9. Series A Convertible Preferred Stock

On February 28, 2006, the Company raised \$3.9 million, net of associated fees of \$395,000, through the sale of 42,500 shares of Series A Cumulative Convertible Preferred Stock and Warrants by means of a private placement to "accredited investors", as that term is used in rules and regulations of the Securities and Exchange Commission. The Convertible Preferred Stock was convertible at any time into a total of 2,401,133 shares of GSE common stock at a conversion price of \$1.77 per share. Each investor received a five-year warrant to purchase GSE common stock equal to 20% of the shares they would receive from the conversion of the Convertible Preferred Stock, at an exercise price of \$1.77. In aggregate, the Company issued warrants to purchase a total of 480,226 shares of GSE common stock. The Convertible Preferred Stockholders were entitled to an 8% cumulative dividend, payable on a semiannual basis every June 30 and December 30. In the first quarter 2007, the Company paid dividends totaling \$49,000 to the preferred stockholders. At any time after March 1, 2007, the Company had the right to convert the remaining outstanding Preferred Stock into shares of GSE common stock when the average of the current stock price during the twenty trading days immediately prior to the date of such conversion exceeded 200% of the Series A Conversion Price. On March 7, 2007, the Company sent notice to the holders of the remaining 20,000 outstanding shares of its

Preferred Stock that the average current stock price for the prior twenty trading days had exceeded 200% of the Conversion Price, and that the Company was converting the outstanding Preferred Stock into common stock. The 20,000 shares of Preferred Stock converted to 1,129,946 shares of GSE common stock.

#### 10. Letters of Credit and Performance Bonds

As of September 30, 2008, the Company was contingently liable for four standby letters of credit totaling approximately \$3.0 million. The letters of credit represent performance bonds on four contracts and have been cash collateralized.

#### 11. Income Taxes

In July 2006, the Financial Accounting Standards Board, or FASB, issued Interpretation, or FIN, No. 48, Accounting for Uncertainty in Income Taxes — An Interpretation of FASB Statement No. 109, “Accounting for Income Taxes”. FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in the Company’s financial statements. It also prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. This interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and expanded disclosure with respect to uncertainty in income taxes. The Company adopted the guidance of FIN No. 48 effective January 1, 2007. The adoption of this accounting pronouncement did not have a material effect on the Company’s financial position, results of operations or cash flows. Furthermore, the Company is not aware of any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits would significantly decrease or increase within the next twelve months.

The Company files in the United States federal jurisdiction and in several state and foreign jurisdictions. Because of the net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from years 1997 forward and is subject to foreign tax examinations by tax authorities for years 2002 and forward. Open tax years related to state and foreign jurisdictions remain subject to examination but are not considered material to our financial position, results of operations or cash flows.

As of September 30, 2008, there have been no material changes to the liability for uncertain tax positions.

The Company does not expect to pay U.S. federal income taxes in 2008, but does expect to pay income taxes in Sweden. In addition, the Company will pay foreign income tax withholding on several non-U.S. contracts. The Company has a full valuation allowance on its deferred tax assets at September 30, 2008.

## 12. Recent Accounting Pronouncements

In September 2006, the Financial Accounting Standards Board (“FASB”) issued Statement No. 157, Fair Value Measurements (“SFAS 157”). SFAS 157 defines fair value, establishes a framework for measuring fair value and expands disclosure requirements regarding fair value measurements. SFAS 157 does not require any new fair value measurements. However, on February 12, 2008 the FASB issued FASB Staff Position No. FAS 157-2, Effective Date of FASB Statement No. 157 (“FSP FAS 157-2”). FSP FAS 157-2 delays the effective date of SFAS 157 for all nonfinancial assets and nonfinancial liabilities until fiscal years beginning after November 15, 2008 and interim periods within those fiscal years. The implementation of SFAS No. 157 for financial assets and financial liabilities, effective January 1, 2008, did not have a material impact on the Company’s condensed consolidated financial statements. The Company is currently assessing the impact of SFAS No. 157 for nonfinancial assets and nonfinancial liabilities on its consolidated financial statements.

In December, 2007, the FASB issued SFAS No. 141(R), Business Combinations (“SFAS 141(R)”), which applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. SFAS 141(R) establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The Company does not expect the adoption of SFAS 141 (R) to have an effect on its results of operations and its financial condition unless it enters into a business combination after January 1, 2009.

In December 2007, the FASB issued SFAS No. 160, Noncontrolling Interests in Consolidated Financial Statements—an amendment of Accounting Research Bulletin No. 51 (“SFAS 160”). SFAS 160 establishes accounting and reporting standards for ownership interests in subsidiaries held by parties other than the parent, the amount of consolidated net income attributable to the parent and to the noncontrolling interest, changes in a parent’s ownership interest and the valuation of retained noncontrolling equity investments when a subsidiary is deconsolidated. SFAS 160 also establishes disclosure requirements that clearly identify and distinguish between the interests of the parent and the interests of the noncontrolling owners. The Company is required to adopt the provisions of SFAS 160 effective January 1, 2009. The Company is currently evaluating the potential impact, if any, of the adoption of SFAS 160 on its consolidated financial statements.

In March 2008, the FASB issued SFAS No. 161, “Disclosures about Derivative Instruments and Hedging Activities - an amendment of FASB Statement No. 133”. SFAS No. 161 is intended to improve financial reporting about derivative instruments and hedging activities by requiring enhanced disclosures to enable investors to better understand how and why an entity uses derivative instruments and their effects on an entity's financial position, financial performance, and cash flows. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008, with early application encouraged. The Company is currently evaluating the impact of adopting SFAS No. 161 on its consolidated financial statements.



GSE SYSTEMS, INC. AND SUBSIDIARIES  
FORM 10-Q

For the Three and Nine Months ended September 30, 2008 and 2007

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

GSE Systems, Inc. ("GSE Systems", "GSE" or the "Company") is a world leader in real-time high fidelity simulation. The Company provides simulation and educational solutions and services to the nuclear and fossil electric utility industry, and the chemical and petrochemical industries. In addition, the Company provides plant monitoring and signal analysis monitoring and optimization software primarily to the power industry. GSE is the parent company of GSE Power Systems, Inc., a Delaware corporation; GSE Power Systems, AB, a Swedish corporation; GSE Engineering Systems (Beijing) Co. Ltd, a Chinese limited liability company; GSE Systems Ltd, a UK limited liability company; and has a 10% minority interest in Emirates Simulation Academy, LLC, a United Arab Emirates limited liability company. The Company has only one reportable segment.

Cautionary Statement Regarding Forward-Looking Statements

This report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward looking statements. Forward-looking statements are not statements of historical facts, but rather reflect our current expectations concerning future events and results. We use words such as "expects", "intends", "believes", "may", "will" and "anticipates" to indicate forward-looking statements. Because these forward-looking statements involve risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements, including, but not limited to, those factors set forth under Item 1A - Risk Factors of the Company's 2007 Annual Report on Form 10-K and those other risks and uncertainties detailed in the Company's periodic reports and registration statements filed with the Securities and Exchange Commission. We caution that these risk factors may not be exhaustive. We operate in a continually changing business environment, and new risk factors emerge from time to time. We cannot predict these new risk factors, nor can we assess the effect, if any, of the new risk factors on our business or the extent to which any factor or combination of factors may cause actual results to differ from those expressed or implied by these forward-looking statements.

If any one or more of these expectations and assumptions proves incorrect, actual results will likely differ materially from those contemplated by the forward-looking statements. Even if all of the foregoing assumptions and expectations prove correct, actual results may still differ materially from those expressed in the forward-looking statements as a result of factors we may not anticipate or that may be beyond our control. While we cannot assess the future impact that any of these differences could have on our business, financial condition, results of operations and cash flows or the market price of shares of our common stock, the differences could be significant. We do not undertake to update any forward-looking statements made by us, whether as a result of new information, future events or otherwise. You are cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this report.

General Business Environment

The nuclear power industry has been largely dormant for the last thirty years with few opportunities to provide new full scope simulators. The Company's nuclear simulation business has concentrated mainly on providing services to the installed base of nuclear simulators worldwide. These services are primarily related to upgrading antiquated simulation software and hardware systems, providing new and improved plant and system simulation models, and modifying the simulator to reflect changes in the physical plant. However, over the last several years, the nuclear power industry has experienced a dramatic change, and most energy experts believe the industry is on the verge of a "renaissance", driven by the gap between the energy that the world is projected to need versus the current capacity, the rising cost of oil, and growing environmental concerns caused by fossil fuels. Government and industry sources and trade journals report that up to 200 new nuclear plants will be built over the next 20 years. In the U.S. alone, applications for accelerated construction and operating licenses have been or are expected to be submitted for 35 new nuclear plants. Each new plant will be required to have a full scope simulator ready for operator training and certification about two years prior to plant operation. In some cases where identical plants share a common site, one simulator will serve both plants. Similar nuclear plant construction programs are underway or planned in China, Russia, Ukraine, Japan and Central Europe to meet growing energy demands. In addition, most U.S. nuclear electric utilities have applied for license extensions and/or power upgrades. These license extensions will lead to significant upgrades to the physical equipment and control room technology which will result in the need to modify or replace the existing plant control room simulators. The Company, having what it believes is the largest installed base of existing simulators, over 60% on a global basis, is well positioned to capture a large portion of this business, although no assurance can be given that it will be successful in doing so. The Company logged approximately \$21.1 million in nuclear simulation orders in the nine months ended September 30, 2008.

In 2005, the Company completed an agreement with Westinghouse Electric Company LLC (“Westinghouse”) to become their preferred vendor for the development of simulators for their AP1000 reactor design. As a result of this agreement, GSE is working closely with Westinghouse to cooperate in the development of simulators for the AP1000 design and assist Westinghouse in the verification and validation of the AP1000 Human Machine interface. The Company’s simulation models have been used to help Westinghouse successfully complete several phases of Human Machine Interface testing with customers, potential customers, and U.S. regulators. Westinghouse and its consortium partners received definitive multi-million dollar contracts to provide four AP1000 nuclear power plants in China. The four plants are to be constructed in pairs on China’s eastern coast at Sanmen in Zhejiang province and Haiyang in Shandong province. In September 2007, GSE received an initial contract from Westinghouse to begin work on the Sanmen simulator project in China. In February 2008, the Company received the balance of its multi-million dollar order for the Sanmen project. In April 2008, GSE received a contract from Westinghouse to begin work on the Haiyang simulator project also in China. The Westinghouse agreement is not exclusive and does not prevent the Company from working with other nuclear vendors anywhere in the world.

The Company’s fossil fueled power simulation business has been growing rapidly over the past three years. The transition from obsolete analog control systems to modern digital control systems and the new requirements for complex emission control systems are contributing to the growth the Company is experiencing in this business, coupled with the fact that GSE’s high-fidelity simulation models can be used to validate control schemes and logics for new designs before the control systems are deployed to the field. GSE builds the plant models based upon design specifications supplied by its customers, and the models then drive the actual digital control systems in the factory. This testing can uncover numerous control system discrepancies. By correcting these problems at the factory versus in the field, GSE’s customers can save millions in reduced down time and reduced commissioning time. The Company logged approximately \$8.6 million in fossil simulation orders in the nine months ended September 30, 2008.

GSE’s process industries simulation business customers include primarily oil and gas production facilities, oil refining plants, chemical plants and petro-chemical facilities. The increased need for oil and oil based refined products coupled with the rising price of oil is creating a global expansion in oil production facilities. In addition, there is more focus on regular, periodic and systematic training of plant operator personnel which may reduce the risk of operator errors and potentially catastrophic environment disasters and/or loss of life.

## Results of Operations

The following table sets forth the results of operations for the periods presented expressed in thousands of dollars and as a percentage of revenues:

| (in thousands)                      | Three months ended September 30, |        |          |        | Nine months ended September 30, |        |           |        |
|-------------------------------------|----------------------------------|--------|----------|--------|---------------------------------|--------|-----------|--------|
|                                     | 2008                             | %      | 2007     | %      | 2008                            | %      | 2007      | %      |
| Contract revenue                    | \$ 7,001                         | 100.0% | \$ 7,526 | 100.0% | \$ 20,639                       | 100.0% | \$ 23,769 | 100.0% |
| Cost of revenue                     | 5,023                            | 71.7%  | 5,150    | 68.4%  | 14,889                          | 72.1%  | 16,345    | 68.8%  |
| Gross profit                        | 1,978                            | 28.3%  | 2,376    | 31.6%  | 5,750                           | 27.9%  | 7,424     | 31.2%  |
| Operating expenses:                 |                                  |        |          |        |                                 |        |           |        |
| Selling, general and administrative | 1,694                            | 24.3%  | 1,813    | 24.1%  | 5,585                           | 27.1%  | 5,567     | 23.4%  |
| Depreciation                        | 114                              | 1.6%   | 59       | 0.8%   | 317                             | 1.5%   | 168       | 0.7%   |
| Total operating expenses            | 1,808                            | 25.9%  | 1,872    | 24.9%  | 5,902                           | 28.6%  | 5,735     | 24.1%  |
| Operating income (loss)             | 170                              | 2.4%   | 504      | 6.7%   | (152)                           | (0.7)% | 1,689     | 7.1%   |
| Interest income (expense), net      | 42                               | 0.6%   | (62)     | (0.8)% | 76                              | 0.4%   | (425)     | (1.8)% |
| Other income (expense), net         | 317                              | 4.5%   | (88)     | (1.2)% | 193                             | 0.9%   | (353)     | (1.5)% |
| Income (loss) before income taxes   | 529                              | 7.5%   | 354      | 4.7%   | 117                             | 0.6%   | 911       | 3.8%   |
| Provision for income taxes          | 99                               | 1.4%   | 51       | 0.7%   | 250                             | 1.2%   | 229       | .9%    |
| Net income (loss)                   | \$ 430                           | 6.1%   | \$ 303   | 4.0%   | \$ (133)                        | (0.6)% | \$ 682    | 2.9%   |

## Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Our estimates, judgments and assumptions are continually evaluated based on available information and experience. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates.

A summary of the Company's significant accounting policies as of December 31, 2007 is included in Note 2 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007. Certain of our accounting policies require higher degrees of judgment than others in their application. These include revenue recognition on long-term contracts, capitalization of computer software development costs, and deferred income tax valuation

allowances. These critical accounting policies and estimates are discussed in the Management's Discussion and Analysis of Financial Condition and Results of Operations section in the 2007 Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

Results of Operations - Three and Nine Months ended September 30, 2008 versus Three and Nine Months ended September 30, 2007

Contract Revenue. Contract revenue for the quarter ended September 30, 2008 totaled \$7.0 million, which was 7.0% lower than the \$7.5 million total revenue for the quarter ended September 30, 2007. For the nine months ended September 30, 2008, contract revenue totaled \$20.6 million, a 13.2% decrease from the \$23.8 million for the nine months ended September 30, 2007. The decrease mainly reflects the substantial completion of the \$16.9 million ESA contract in 2008. For the three months ended September 30, 2008 and 2007, the Company recognized \$40,000 and \$2.1 million, respectively, of contract revenue on this project using the percentage-of-completion method, which accounted for 0.6% and 27.4% of the Company's consolidated revenue, respectively. For the nine months ended September 30, 2008 and 2007, the Company recognized \$1.2 million and \$8.1 million, respectively of contract revenue on the ESA project, which accounted for 6.0% and 34.2%, respectively, of the Company's consolidated revenue. The decrease in revenue from the ESA project was partially offset by an increase in the Company's fossil fueled power simulation revenue, which totaled \$2.1 million in the third quarter 2008 versus \$1.7 million in the third quarter 2007 and totaled \$6.8 million in the nine months ended September 30, 2008 versus \$4.6 million in the same period of 2007. In the nine months ended September 30, 2008, the Company recorded total orders of \$31.2 million versus \$29.3 million in the nine months ended September 30, 2007. At September 30, 2008, the Company's backlog was \$34.7 million.

Gross Profit. Gross profit totaled \$2.0 million for the quarter ended September 30, 2008 versus \$2.4 million for the same quarter in 2007. As a percentage of revenue, gross profit decreased from 31.6% for the three months ended September 30, 2007 to 28.3% for the three months ended September 30, 2008. For the nine months ended September 30, 2008, gross profit decreased \$1.7 million from the same period in the prior year to \$5.8 million (27.9% of revenue). The decrease in gross margin reflects the lower revenue generated by the Company's higher margined ESA contract and the lower revenue base to recover the Company's relatively fixed overhead.

Selling, General and Administrative Expenses. Selling, general and administrative ("SG&A") expenses totaled \$1.7 million in the quarter ended September 30, 2008 as compared to \$1.8 million in the quarter ended September 30, 2007. For both the nine months ended September 30, 2008 and 2007, SG&A expenses totaled \$5.6 million. The variance in SG&A spending reflects the following:

- ◆ Business development and marketing costs increased from \$663,000 in the third quarter 2007 to \$675,000 in the third quarter of 2008 and increased from \$1.9 million for the nine months ended September 30, 2007 to \$2.3 million in the same period 2008. The increase in the 2008 year-to-date costs mainly reflects a \$30,000 increase in bidding and proposal costs, which are the costs of operations personnel in assisting with the preparation of contract proposals, a \$128,000 increase in business development travel expenses, the cost of attending the first quarter 2008 Society in Computer Simulation trade show (\$27,000) and the cost of the Company's September 2008 Simworld user's conference in Beijing, China (\$68,000).
- ◆ The Company's general and administrative expenses totaled \$920,000 in the third quarter 2008, which was 13.5% lower than the \$1.1 million incurred in the third quarter 2007. For the nine months ended September 30, 2008 and 2007, general and administrative expenses totaled \$3.1 and \$3.2 million, respectively. The decrease in general and administrative expense in 2008 as compared to 2007 reflects the following spending variances:
  - o The Company incurred lower legal fees in the third quarter 2008 as compared to the third quarter 2007.
- o In 2007, the Company hired an independent accounting firm to evaluate the changes in the Company's ownership and to determine the amount of any limitation on the usage of the Company's tax loss carryforwards.
- ◆ Gross spending on software product development ("development") totaled \$236,000 in the quarter ended September 30, 2008 as compared to \$251,000 in the same period of 2007. For the nine months ended September 30, 2008, gross development spending totaled \$773,000 versus \$953,000 in the same period of 2007. For the three months ended September 30, 2008, the Company expensed \$99,000 and capitalized \$137,000 of its development spending while in the three months ended September 30, 2007, the Company expensed \$86,000 and capitalized \$165,000 of its development spending. For the nine months ended September 30, 2008, the Company expensed \$243,000 and capitalized \$530,000 of its development spending and expensed \$440,000 and capitalized \$513,000 of its development spending in the nine months ended September 30, 2007. The Company's capitalized development expenditures in 2008 were mainly related to the customization of RELAP5-RT software (which simulates transient fluid dynamics, neutronics and heat transfer in nuclear power plants) to run on the Company's real-time executive software and the enhancement to JCAD to add the capability to convert AutoCAD Control Logic Diagrams to the Company's JControl modeling tool. The Company anticipates that its total gross development spending in 2008 will approximate \$1.0 million.

Depreciation. Depreciation expense totaled \$114,000 and \$59,000 during the quarters ended September 30, 2008 and 2007, respectively. For the nine months ended September 30, 2008 and 2007, depreciation expense totaled \$317,000 and \$168,000, respectively. The higher 2008 depreciation expense reflects the increase in 2007 capital spending which totaled \$778,000, a 320% increase as compared to the capital spending in 2006. Approximately 50% of the capital spending in 2007 was for furniture and computer equipment for the training centers that the Company established at Georgia Tech University and Strathclyde University; the balance was for computers, printers, servers and software. In addition, capital spending in the first nine months of 2008 totaled \$600,000 versus \$258,000 for the first nine months of 2007. The 2008 capital spending was largely related to the Company's move to its new headquarters in Sykesville, Maryland.

Operating Income. The Company had operating income of \$170,000 (2.4% of revenue) in the third quarter 2008, as compared with operating income of \$504,000 (6.7% of revenue) for the same period in 2007. For the nine months ended September 30, 2008 and 2007, the Company had an operating loss of \$152,000 (0.7% of revenue) and operating income of \$1.7 million (7.1% of revenue), respectively. The variances were due to the factors outlined above.

Interest Income (Expense), Net. For the three and nine months ended September 30, 2008, net interest income totaled \$42,000 and \$76,000, respectively. For the three and nine months ended September 30, 2007, net interest expense totaled \$62,000 and \$425,000, respectively.

In June 2007, using a portion of the proceeds from the Company's June 2007 common stock and warrant transaction, the Company paid off the outstanding balance of its Laurus Master Fund Ltd. line of credit and did not borrow against the line of credit in 2008. On March 6, 2008, the Laurus line of credit expired. The Company incurred interest expense of \$0 and \$107,000 on borrowings from the Laurus line of credit in the three and nine months ended September 30, 2007, respectively.

On March 28, 2008, the Company entered into two separate revolving line of credit agreements for two-year revolving lines of credit with Bank of America ("BOA") in an aggregate amount of up to \$5.0 million. One line of credit is in the principal amount of up to \$3.5 million and is guaranteed by the U.S. Export-Import Bank. The other line of credit is in the principal amount of up to \$1.5 million. The Company has not borrowed any funds against either BOA line of credit since the closing.

The deferred financing costs incurred in conjunction with the Laurus Master Fund line of credit were amortized over the two-year period of the line of credit, with the final amortization expense recorded in February 2008. Thus, there was no amortization expense in the three months ended September 30, 2008, but amortization expense totaled \$89,000 in the nine months ended September 30, 2008. This compares to amortization expense of \$133,000 and \$399,000 in the three and nine months ended September 30, 2007, respectively. Amortization of the deferred financing costs incurred in conjunction with the BOA lines of credit began in April 2008; amortization expense totaled \$18,000 and \$35,000 in the three and nine months ended September 30, 2008, respectively.

Interest income earned on short-term investments of the Company's operating cash totaled \$12,000 and \$52,000 for the three and nine months ended September 30, 2008, respectively, versus \$40,000 in both the three and nine months ended September 30, 2007.

At September 30, 2008, the Company has approximately \$3.0 million of cash in Certificates of Deposit with BOA that are being used as collateral for four performance bonds. At September 30, 2007, the Company had approximately \$2.3 million of cash in Certificates of Deposit being used as collateral for four performance bonds. The Company earned approximately \$33,000 and \$97,000 in interest income on the Certificates of Deposit in the three and nine months ended September 30, 2008, respectively, versus \$25,000 and \$74,000 in interest income in the three and nine months ended September 30, 2007, respectively.

In May 2007, the Company deposited \$1.2 million into a restricted, interest-bearing account at the Union National Bank in the United Arab Emirates as a partial guarantee for the \$11.8 million credit facility that UNB has extended to ESA. GSE recorded approximately \$10,000 and \$39,000 interest income in the three and nine months ended September 30, 2008, respectively.

Other miscellaneous interest income, net totaled \$5,000 and \$12,000 in the three and nine months ended September 30, 2008, respectively. Other miscellaneous interest income (expense), net totaled \$6,000 of interest income and \$33,000 of interest expense in the three and nine months ended September 30, 2007, respectively.

Other Income (Expense), Net. For the three and nine months ended September 30, 2008, other income (expense), net was \$317,000 and \$193,000, respectively. For the three and nine months ended September 30, 2007, other income (expense), net was (\$88,000) and (\$353,000), respectively. The major components of other income (expense), net include the following items:

- ◆ The Company accounts for its investment in ESA using the equity method. In accordance with the equity method, the Company has eliminated 10% of the profit from this contract as the training simulators are assets that will be recorded on the books of ESA, and the Company is thus required to eliminate its proportionate share of the profit included in the asset value. The profit elimination totaled \$0 and \$38,000 for the three and nine months ended September 30, 2008 and \$105,000 and \$371,000 for the three and nine months ended September 30, 2007, respectively.
- ◆ For the three and nine months ended September 30, 2008, the Company recognized a \$50,000 and \$138,000 equity loss, respectively, on its investment in ESA.
- ◆ At September 30, 2008, the Company had contracts for the sale of approximately 2.4 million Euro, 2.5 million British Pounds Sterling, and 135 million Japanese Yen at fixed rates. The contracts expire on various dates through September 2013. The Company had not designated the contracts as hedges and has recorded the change in the estimated fair value of the contracts during the three and nine months ended September 30, 2008 (a gain of \$360,000 and \$365,000, respectively) in other income (expense).
- ◆ At September 30, 2007, the Company had contracts for the sale of approximately 36 million Japanese Yen and 125,000 British Pounds Sterling at fixed rates. The contracts expired on various dates through January 2008. The Company had not designated the contracts as hedges and recorded the change in the estimated fair value of the contracts during the three and nine months ended September 30, 2007 (a loss of \$6,000 and \$8,000, respectively) in other income (expense).

Provision for Income Taxes. In July 2006, the Financial Accounting Standards Board, or FASB, issued Interpretation, or FIN, No. 48, Accounting for Uncertainty in Income Taxes — An Interpretation of FASB Statement No. 109, "Accounting for Income Taxes". FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in the Company's financial statements. It also prescribes a recognition threshold and measurement attribute for the financial



statement recognition and measurement of tax positions taken or expected to be taken in a tax return. This interpretation also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods and expanded disclosure with respect to uncertainty in income taxes. The Company adopted the guidance of FIN No. 48 effective January 1, 2007. The adoption of this accounting pronouncement did not have a material effect on the Company's financial position, results of operations or cash flows. Furthermore, the Company is not aware of any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits would significantly decrease or increase within the next twelve months.

The Company files in the United States federal jurisdiction and in several state and foreign jurisdictions. Because of the net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from years 1997 and forward and is subject to foreign tax examinations by tax authorities for years 2001 and forward. Open tax years related to state and foreign jurisdictions remain subject to examination but are not considered material to our financial position, results of operations or cash flows.

As of September 30, 2008, there have been no material changes to the liability for uncertain tax positions.

The Company does not expect to pay U.S. federal income taxes in 2008, but does expect to pay income taxes in Sweden. In addition, the Company will pay foreign income tax withholding on several non-U.S. contracts. The Company has a full valuation allowance on its deferred tax assets at September 30, 2008.

#### Liquidity and Capital Resources

As of September 30, 2008, the Company's cash and cash equivalents totaled \$7.5 million compared to \$8.2 million at December 31, 2007.

Cash provided by (used in) operating activities. Net cash provided by operating activities for the nine months ended September 30, 2008 totaled \$773,000. Significant changes in the Company's assets and liabilities in the nine months ended September 30, 2008 included:

- ◆ A \$1.2 million increase in the Company's contract receivables. The Company's trade receivables increased from \$4.2 million at December 31, 2007 (including \$1.0 million due from ESA) to \$8.7 million at September 30, 2008 (including \$2.7 million due from ESA) while the Company's unbilled receivables decreased by \$3.3 million to \$3.2 million at September 30, 2008. At September 30, 2008, trade receivables outstanding for more than 90 days totaled \$3.3 million (including \$2.7 million from ESA) versus \$2,000 at December 31, 2007. Despite the increase in overdue receivables, the Company believes the entire balance will be received and has not increased its bad debt reserve.
- ◆ A \$1.4 million increase in billings in excess of revenues earned. The increase is due to the timing of contracted billing milestones of the Company's current projects.

For the nine months ended September 30, 2007, net cash used in operating activities was \$242,000. Significant changes in the Company's assets and liabilities in the nine months ended September 30, 2007 included:

- ◆ A \$2.9 million increase in contract receivables. \$1.6 million of the increase was due to an increase in the total ESA trade receivable from \$1.7 million at December 31, 2006 (paid in May 2007) to \$3.3 million at September 30, 2007. The balance of the increase was mainly due to an increase in unbilled receivables.

- ◆ A \$1.1 million increase in billings in excess of revenue earned, most of which was related to a large advance payment for the Company's contract with Sinopec Ningbo Engineering Company.

Cash used in investing activities. For the nine months ended September 30, 2008, net cash used in investing activities totaled \$1.9 million. The Company increased its investment in ESA by \$422,000, capital expenditures totaled \$600,000, and capitalized software development costs totaled \$530,000. Cash used as collateral for stand-by letters of credit increased by \$358,000, net. The Company anticipates that its total capital expenditures in 2008 will approximate \$700,000 (of which \$600,000 has been spent through September 30, 2008) and expects to make additional cash investments in ESA of \$108,000 in the fourth quarter of 2008.

Net cash used in investing activities for the three months ended September 30, 2007 totaled \$2.1 million. Capital expenditures totaled \$258,000, capitalized software development costs totaled \$513,000 and the Company increased its investment in ESA by \$128,000. Two cash collateralized stand-by letters of credit expired in 2007 and the \$63,000 cash collateral was released. The Company deposited \$1.2 million into a restricted, interest-bearing account at the Union National Bank ("UNB") in the United Arab Emirates as a partial guarantee for the \$11.8 million credit facility that UNB has extended to ESA. The guarantee will remain in place until the expiration of the ESA credit facility on December 31, 2014 or earlier if ESA pays down and terminates the credit facility.

Cash provided by financing activities. Cash provided by financing activities for the nine months ended September 30, 2008 totaled \$483,000. The Company received \$571,000 from the issuance of common stock from the exercise of warrants and employee stock options and spent \$88,000 on deferred financing costs in conjunction with the new Bank of America lines of credit.

In the nine months ended September 30, 2007, the Company generated \$8.0 million from financing activities. The Company generated net proceeds of \$9.2 million from the issuance of 1,666,667 shares of common stock and warrants which was used to pay down the Laurus Master Fund line of credit. The Company generated \$1.3 million from the exercise of warrants and employee stock options. The Company recognized a tax benefit of \$41,000 related to employee stock option exercises. The Company paid dividends of \$49,000 to the Series A Cumulative Convertible Preferred stockholders and paid the \$316,000 preferred stock dividend that was due to ManTech since 2003.

Based on the Company's forecasted expenditures and cash flow, the Company believes that it will generate sufficient cash through its normal operations and through the utilization of its current credit facility to meet its liquidity and working capital needs in 2008.

#### Credit Facilities

On March 28, 2008, the Company entered into two separate revolving line of credit agreements for two-year revolving lines of credit with Bank of America, N.A. ("BOA"), in an aggregate amount of up to \$5.0 million. The Company and its subsidiary, GSE Power Systems, Inc., are jointly and severally liable as co-borrowers. The credit facilities are collateralized by substantially all of the Company's assets and enable the Company to borrow funds to support working capital needs and standby letters of credit. The first line of credit in the principal amount of up to \$3.5 million enables the Company to borrow funds up to 90% of eligible foreign accounts receivable, plus 75% of eligible unbilled foreign receivables and 100% of the cash collateral pledged to BOA on outstanding letters of credit. This line of credit is 90% guaranteed by the Export-Import Bank of the United States. The interest rate on this line of credit is based on the daily LIBOR rate plus 150 basis points, with interest only payments due monthly. The second line of credit in the principal amount of up to \$1.5 million enables the Company to borrow funds up to 80% of domestic accounts receivable and 30% of domestic unbilled receivables. The interest rate on this line of credit is based on the daily LIBOR rate plus 225 basis points, with interest only payments due monthly. The credit facilities require the Company to comply with certain financial ratios and preclude the Company from paying dividends and making acquisitions beyond certain limits without the bank's consent. The Company's available borrowing base under the two

lines of credit was \$3.7 million at September 30, 2008, none of which had been utilized.

## Common Stock and Warrant Transaction

On June 22, 2007, the Company raised \$9.2 million, net of associated fees of \$768,000, through the sale of 1,666,667 shares (the “Shares”) of its common stock, \$.01 par value per share, by means of a private placement to selected institutional investors. Each investor received a five-year warrant to purchase GSE common stock (the “Warrant Shares”) equal to 10% of the shares of common stock that they had purchased at an exercise price of \$6.00 per share (the “Warrants”). In aggregate, the Company issued Warrants to purchase a total of 166,667 shares of GSE common stock.

The Company filed its registration statement on Form S-3 (the “Registration Statement”) with the Securities and Exchange Commission (the “Commission”) on July 16, 2007 covering the offer and sale, from time to time, of the Shares, the Warrant Shares and shares of common stock issuable upon exercise of warrants that may be issued as liquidated damages under the terms of a certain registration rights agreement entered into between the Company and the investors (the “Registration Rights Agreement”) in connection with the private placement. The Registration Statement became effective on August 8, 2007 and, pursuant to the provisions of the Registration Rights Agreement, the Company is obligated to use commercially reasonable efforts to, after the date on which the Registration Statement became effective, cause the Registration Statement to remain continuously effective as to all Shares and Warrant Shares, other than for an aggregate of more than 30 consecutive trading days or for more than an aggregate of 60 trading days in any 12-month period. In the event of a default of the foregoing obligation, the Company will be required to issue to the investors, as liquidated damages, on the date the foregoing default occurs and each monthly anniversary thereafter, a number of warrants (on the same terms as the Warrants) equal to 2% of the number of Shares then held by such investor, not to exceed 10% of the total number of Shares then held by such investor, and thereafter cash, in an amount equal to 2% of the aggregate purchase price paid by the investors, not to exceed 30% of the aggregate purchase price paid by the investors.

At the date of issuance, the fair value of the Warrants was \$510,000 and the fair value of the Shares was \$9.5 million. The fair value of the Warrants and the Shares was determined by the use of the relative fair value method, in which the \$10.0 million gross proceeds was allocated based upon the fair values of the Warrants, as determined by using the Black-Scholes Model, and the Shares, as determined by the closing price of the common stock on the American Stock Exchange on the date the transaction was closed.

The Company paid the placement agent a fee in the amount of 6% of the gross proceeds received by the Company from the offering (\$600,000). In addition to the placement agent fee, the Company paid \$168,000 of other transaction fees related to the offering.

The proceeds were used to pay down the Company’s line of credit and for other working capital purposes.

## Series A Cumulative Preferred Stock

On February 28, 2006, the Company raised \$3.9 million, net of associated fees of \$395,000, through the sale of 42,500 shares of Series A Cumulative Convertible Preferred Stock and Warrants by means of a private placement to “accredited investors”, as that term is used in rules and regulations of the Securities and Exchange Commission. The Convertible Preferred Stock was convertible at any time into a total of 2,401,133 shares of GSE common stock at a conversion price of \$1.77 per share. Each investor received a five-year warrant to purchase GSE common stock equal to 20% of the shares they would receive from the conversion of the Convertible Preferred Stock, at an exercise price of \$1.77. In aggregate, the Company issued warrants to purchase a total of 480,226 shares of GSE common stock. The Convertible Preferred Stockholders were entitled to an 8% cumulative dividend, payable on a semiannual basis every June 30 and December 30. In the first quarter 2007, the Company paid dividends totaling \$49,000 to the preferred stockholders. At any time after March 1, 2007, the Company had the right to convert the Preferred Stock into shares of GSE common stock when the average of the current stock price during the twenty trading days

immediately prior to the date of such conversion exceeded 200% of the Series A Conversion Price. Prior to March 7, 2007, the holders of 22,500 shares of Preferred Stock had already elected to convert their Preferred Stock into a total of 1,271,187 shares of Common Stock; 8,580 shares of Preferred Stock were converted in 2006 and 13,920 shares of preferred Stock in 2007. On March 7, 2007, the Company sent notice to the holders of the remaining 20,000 outstanding shares of its Preferred Stock that the average current stock price for the prior twenty trading days had exceeded 200% of the Conversion Price, and that the Company was converting the outstanding Preferred Stock into common stock. The 20,000 shares of Preferred Stock converted to 1,129,946 shares of GSE common stock. In 2006, the Preferred Stockholders exercised 28,248 warrants and an additional 11,300 warrants were exercised in the first quarter 2007.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

The Company's market risk is principally confined to changes in foreign currency exchange rates. The Company's exposure to foreign exchange rate fluctuations arises in part from inter-company accounts in which costs incurred in one entity are charged to other entities in different foreign jurisdictions. The Company is also exposed to foreign exchange rate fluctuations as the financial results of all foreign subsidiaries are translated into U.S. dollars in consolidation. As exchange rates vary, those results when translated may vary from expectations and adversely impact overall expected profitability.

The Company utilizes forward foreign currency financial instruments to manage market risks associated with the fluctuations in foreign currency exchange rates. It is the Company's policy to use derivative financial instruments to protect against market risk arising in the normal course of business. The criteria the Company uses for designating an instrument as a hedge include the instrument's effectiveness in risk reduction and one-to-one matching of derivative instruments to underlying transactions. The Company monitors its foreign currency exposures to maximize the overall effectiveness of its foreign currency hedge positions. The principal currencies hedged are the Japanese Yen, the British Pound Sterling, and the Euro. The Company's objectives for holding derivatives are to minimize the risks using the most effective methods to reduce the impact of these exposures. The Company minimizes credit exposure by limiting counterparties to nationally recognized financial institutions.

At September 30, 2008, the Company had contracts for the sale of approximately 2.4 million Euro, 2.5 million British Pounds Sterling, and 135 million Japanese Yen at fixed rates. The contracts expire on various dates through September 2013. The Company had not designated the contracts as hedges and has recorded the change in the estimated fair value of the contracts during the three and nine months ended September 30, 2008 (a gain of \$360,000 and \$365,000, respectively) in other income (expense).

At September 30, 2007, the Company had contracts for the sale of approximately 36 million Japanese Yen and 125,000 British Pounds Sterling at fixed rates. The contracts expired on various dates through January 2008. The Company had not designated the contracts as hedges and recorded the change in the estimated fair value of the contracts during the three and nine months ended September 30, 2007 (a loss of \$6,000 and \$8,000, respectively) in other income (expense).

The Company is also subject to market risk related to the interest rate on its existing lines of credit. However, during the nine months ended September 30, 2008, the Company had no outstanding borrowings from its lines of credit.

Item 4. Controls and Procedures

(a) Evaluation of disclosure controls and procedures. The Company maintains adequate internal disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act"), as amended) as of the end of the period covered by this quarterly report on Form 10-Q pursuant to Rule 13a-15(b) under the Exchange Act that are designed to ensure that information required to be disclosed by it in its reports filed or submitted pursuant to the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms and that information required to be disclosed by the Company in its Exchange Act reports is accumulated and communicated to management, including the Company's Chief Executive Officer ("CEO"), who is its principal executive officer, and Chief Financial Officer ("CFO"), who is its principal financial officer, to allow timely decisions regarding required disclosure.

The Company's CEO and CFO are responsible for establishing and maintaining adequate internal control over the Company's financial reporting. They have reviewed and evaluated the effectiveness of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-14 as of September 30, 2008 in order to ensure the reporting of material information required to be included in the Company's periodic filings with the Commission comply with the Commission's requirements for certification of this Form 10-Q. Based on that evaluation, the Company's CEO and CFO have concluded that as of September 30, 2008 the Company's disclosure controls and procedures were effective at the reasonable assurance level to satisfy the objectives for which they were intended and that the information required to be disclosed is (a) recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms and (b) compiled and communicated to our management to allow timely decisions regarding required disclosure.

(b) Changes in internal control. There were no changes in the Company's internal control over financial reporting that occurred during the most recent fiscal quarter that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

Limitation of Effectiveness of Controls

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. The design of any control system is based, in part, upon the benefits of the control system relative to its costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of control. In addition, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events. Because of inherent limitation in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. The Company's controls and procedures are designed to provide a reasonable level of assurance of achieving their objectives.



GSE SYSTEMS, INC. AND SUBSIDIARIES

FORM 10-Q

For the Three and Nine Months ended September 30, 2008 and 2007

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

In accordance with its conduct in the ordinary course of business, certain actions and proceedings are pending to which the Company is a party. In the opinion of management, the aggregate liabilities, if any, arising from such actions are not expected to have a material adverse effect on the financial condition of the Company.

Item 1A. Risk Factors

The Company has no material changes to the disclosure on this matter made in its Annual Report on Form 10-K for the fiscal year ended December 31, 2007.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None

Item 3. Defaults Upon Senior Securities

None

Item 4. Submission of Matters to a Vote of Security Holders

None

Item 5. Other Information

None

Item 6. Exhibits

31.1 Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

31.2 Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32.1 Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.



SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: November 10,  
2008

GSE SYSTEMS, INC.

/S/ JOHN V. MORAN  
John V. Moran  
Chief Executive Officer  
(Principal Executive Officer)

/S/ JEFFERY G. HOUGH  
Jeffery G. Hough  
Senior Vice President and Chief Financial  
Officer  
(Principal Financial and Accounting Officer)