

GSE SYSTEMS INC  
Form 10-Q  
May 15, 2017  
UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

Quarterly Report Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934  
for the Quarterly Period Ended March 31, 2017

or

Transition Report Pursuant to Section 13 or 15(d)  
of the Securities Exchange Act of 1934  
for the transition period from \_\_\_\_ to \_\_\_\_

Commission File Number 001-14785

GSE Systems, Inc.  
(Exact name of registrant as specified in its charter)

Delaware 52-1868008  
(State of incorporation) (I.R.S. Employer Identification Number)

1332 Londontown Blvd., Suite 200, Sykesville MD 21784  
(Address of principal executive offices) (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 [ X ]  
No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such period that the registrant was required to submit and post such files). Yes [ X ]  
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 "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer   Accelerated filer   Non-accelerated filer   Smaller reporting company  
(Do not check if a smaller reporting company)

Edgar Filing: GSE SYSTEMS INC - Form 10-Q

Indicate by check mark whether the registrant is a shell company (as defined in rule 12(b)-2 of the Exchange Act).  
Yes [ ] No [X]

There were 19,183,968 shares of common stock, with a par value of \$0.01 per share outstanding as of May 12, 2017.

1

---

GSE SYSTEMS, INC.  
 QUARTERLY REPORT ON FORM 10-Q  
 INDEX

	<u>PAGE</u>
PART I. FINANCIAL INFORMATION	3
Item 1. Financial Statements:	
Consolidated Balance Sheets as of March 31, 2017 (unaudited) and December 31, 2016	3
Unaudited Consolidated Statements of Operations for the Three Months Ended March 31, 2017 and March 31, 2016	4
Unaudited Consolidated Statements of Comprehensive Income (Loss) for the Three Months Ended March 31, 2017 and March 31, 2016	5
Unaudited Consolidated Statement of Changes in Stockholders' Equity for the Three Months Ended March 31, 2017	6
Unaudited Consolidated Statements of Cash Flows for the Three Months Ended March 31, 2017 and March 31, 2016	7
Notes to Consolidated Financial Statements	8
Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations	21
Item 3. Quantitative and Qualitative Disclosures About Market Risk	37
Item 4. Controls and Procedures	37
PART II. OTHER INFORMATION	38
Item 1. Legal Proceedings	38
Item 1A. Risk Factors	38
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	38
Item 3. Defaults Upon Senior Securities	38
Item 4. Mine Safety Disclosures	38
Item 5. Other Information	38
Item 6. Exhibits	38
SIGNATURES	39

## PART I - FINANCIAL INFORMATION

## Item 1. Financial Statements

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

	March 31, 2017 (Unaudited)	December 31, 2016
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 21,625	\$ 21,747
Restricted cash	1,140	1,140
Contract receivables, net	13,897	18,863
Prepaid expenses and other current assets	4,024	2,052
Total current assets	40,686	43,802
Equipment, software, and leasehold improvements	6,845	6,759
Accumulated depreciation	(5,648 )	(5,527 )
Equipment, software, and leasehold improvements, net	1,197	1,232
Software development costs, net	894	982
Goodwill	5,612	5,612
Intangible assets, net	402	454
Other assets	72	1,574
Total assets	\$ 48,863	\$ 53,656
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 587	\$ 923
Accrued expenses	2,389	2,437
Accrued compensation	2,015	2,624
Billings in excess of revenue earned	18,192	21,444
Accrued warranty	1,209	1,137
Contingent consideration	1,508	2,105
Other current liabilities	750	716
Total current liabilities	26,650	31,386
Other liabilities	1,261	1,149
Total liabilities	27,911	32,535
Commitments and contingencies		
Stockholders' equity:		
Preferred stock \$0.01 par value, 2,000,000 shares authorized, no shares issued and outstanding	-	-
Common stock \$0.01 par value, 30,000,000 shares authorized, 20,777,168 and 20,433,608 shares issued and 19,178,257 and 18,834,697 shares outstanding	208	204
Additional paid-in capital	75,120	75,120
Accumulated deficit	(49,693 )	(49,427 )

Edgar Filing: GSE SYSTEMS INC - Form 10-Q

Accumulated other comprehensive loss	(1,684	)	(1,777	)
Treasury stock at cost, 1,598,911 shares in 2017 and 2016	(2,999	)	(2,999	)
Total stockholders' equity	20,952		21,121	
Total liabilities and stockholders' equity	\$ 48,863		\$ 53,656	

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

3

---

GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data)  
(Unaudited)

	Three months ended March 31,	
	2017	2016
Revenue	\$16,342	\$12,976
Cost of revenue	12,220	9,352
Gross profit	4,122	3,624
Operating expenses:		
Selling, general and administrative	3,592	2,757
Research and development	402	354
Restructuring charges	45	125
Depreciation	76	100
Amortization of definite-lived intangible assets	64	73
Total operating expenses	4,179	3,409
Operating (loss) income	(57 )	215
Interest income, net	27	27
Loss on derivative instruments, net	(160 )	(118 )
Other (expense) income, net	(3 )	102
(Loss) income before income taxes	(193 )	226
Provision for income taxes	73	88
Net (loss) income	\$(266 )	\$138
Basic (loss) earnings per common share	\$(0.01 )	\$0.01
Diluted (loss) earnings per common share	\$(0.01 )	\$0.01

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 March 31, 2017 2016	
Net (loss) income	\$(266)	\$138
Foreign currency translation adjustment	93	49
Comprehensive (loss) income	\$(173)	\$187

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

GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY  
(in thousands)  
(Unaudited)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Treasury Stock		Total
	Shares	Amount				Shares	Amount	
Balance, January 1, 2017	20,434	\$ 204	\$ 75,120	\$ (49,427 )	\$ (1,777 )	(1,599)	\$(2,999)	\$21,121
Stock-based compensation expense	-	-	614	-	-	-	-	614
Common stock issued for options exercised	31	1	61	-	-	-	-	62
Common stock issued for RSUs vested	312	3	(3 )	-	-	-	-	-
Vested RSU shares withheld to pay taxes	-	-	(672 )	-	-	-	-	(672 )
Foreign currency translation adjustment	-	-	-	-	93	-	-	93
Net loss	-	-	-	(266 )	-	-	-	(266 )
Balance, March 31, 2017	20,777	\$ 208	\$ 75,120	\$ (49,693 )	\$ (1,684 )	(1,599)	\$(2,999)	\$20,952

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)

	Three months ended March 31,	
	2017	2016
Cash flows from operating activities:		
Net (loss) income	\$(266 )	\$138
Adjustments to reconcile net (loss) income to net cash provided by operating activities:		
Depreciation	76	100
Amortization of definite-lived intangible assets	64	73
Amortization of capitalized software development costs	117	81
Change in fair value of contingent consideration	254	(69 )
Stock-based compensation expense	596	247
Loss on derivative instruments, net	160	118
Deferred income taxes	-	36
Gain on sale of equipment, software, and leasehold improvements	-	(1 )
Changes in assets and liabilities:		
Contract receivables, net	4,937	334
Prepaid expenses and other assets	(523 )	(515 )
Accounts payable, accrued compensation, and accrued expenses	(1,184 )	1,226
Billings in excess of revenue earned	(3,279 )	(492 )
Accrued warranty	67	(101 )
Other liabilities	325	465
Cash provided by operating activities	1,344	1,640
Cash flows from investing activities:		
Proceeds from sale of equipment, software and leasehold improvement	-	31
Capital expenditures	(44 )	(18 )
Capitalized software development costs	(29 )	(131 )
Restrictions of cash as collateral under letters of credit	-	(2 )
Releases of cash as collateral under letters of credit	-	1
Cash used in investing activities	(73 )	(119 )
Cash flows from financing activities:		
Proceeds from issuance of common stock on the exercise of stock options	62	4
Contingent consideration payments to Hyperspring, LLC	(851 )	(1,421 )
RSUs withheld to pay taxes	(672 )	-
Cash used in financing activities	(1,461 )	(1,417 )
Effect of exchange rate changes on cash	68	37
Net (decrease) increase in cash and cash equivalents	(122 )	141
Cash and cash equivalents at beginning of year	21,747	11,084
Cash and cash equivalents at end of period	\$21,625	\$11,225

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



## 1. Summary of Significant Accounting Policies

### Basis of Presentation

The consolidated interim financial statements included herein have been prepared by GSE Systems, Inc. (the "Company," "GSE," "we," "us," or "our") and are unaudited. 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 ("U.S. 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 year ended December 31, 2016, filed with the Securities and Exchange Commission on March 28, 2017. Certain reclassifications have been made to prior period amounts to conform to the current presentation. Subcontractor payables have been reclassified on the Consolidated Balance Sheets from Accounts payable to Accrued expenses. In addition, the Company reclassified research and development costs from Selling, general and administrative expenses and presented them as a separate caption within operating expenses on the consolidated statement of operations. The Company also reclassified the current portion of deferred taxes to noncurrent within other assets and other liabilities on the consolidated balance sheets.

The Company has two reportable segments as follows:

#### Performance Improvement Solutions (approximately 59% of revenue)

Our Performance Improvement Solutions segment primarily encompasses our power plant high-fidelity simulation solutions, as well as engineering solutions and interactive computer based tutorials/simulation focused on the process industry. This segment includes various simulation products, engineering services, and operation training systems delivered across the industries we serve: primarily nuclear and fossil fuel power generation, as well as the process industries. Our simulation solutions include the following: (1) simulation software and services, including operator training systems, for the nuclear power industry, (2) simulation software and services, including operator training systems, for the fossil power industry, and (3) simulation software and services for the process industries used to teach fundamental industry processes and control systems to newly hired employees and for ongoing workforce development and training. GSE and its predecessors have been providing these services since 1976.

#### Nuclear Industry Training and Consulting (approximately 41% of revenue)

Nuclear Industry Training and Consulting provides highly specialized and skilled nuclear operations instructors and other consultants to the nuclear power industry. These employees work at our clients' facilities under client direction. Examples of these highly skilled positions are senior reactor operations instructors, procedure writers, work management specialists, planners and training material developers. This business is managed through our Hyperspring subsidiary. The business model, management focus, margins and other factors clearly separate this business line from the rest of the Company's product and service portfolio. Hyperspring has been providing these services since 2005.

Financial information about the two business segments is provided in Note 15 of the accompanying consolidated financial statements.

The preparation of financial statements in conformity with U.S. 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 on long-term contracts, product

warranties, capitalization of software development costs, valuation of goodwill and intangible assets acquired, valuation of contingent consideration issued in business acquisitions, and the recoverability of deferred tax assets. Actual results could differ from these estimates and those differences could be material.

## Revenue recognition

The Company recognizes revenue through fixed price contracts for the sale of uniquely designed/customized systems containing hardware, software and other materials which generally apply to the Performance Improvement Solutions segment and time and material contracts for Nuclear Industry Training and Consulting support and service agreements.

In accordance with Accounting Standards Codification (ASC) 605-35, Construction-Type and Production-Type Contracts (ASC 605), the Performance Improvement Solutions segment accounts for revenue under fixed-price contracts using the percentage-of-completion method. This methodology recognizes revenue and earnings as work progresses on the contract and is based on costs incurred to date compared to total estimated cost to complete 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. We recognize 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.

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 our revenue recognition as a significant change in the estimates can cause our revenue and related margins to change significantly from the amounts estimated in the early stages of the project.

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

Our system design contracts do not normally provide for post contract support (PCS) in terms of software upgrades, software enhancements or telephone support. 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. We recognize revenue from these contracts ratably over the term of the agreements.

Revenue from the sale of software licenses without other elements in the contract and which do not require significant modifications or customization for the Company's modeling tools are recognized when the license agreement is signed, the license fee is fixed and determinable, delivery has occurred, and collection is considered probable. We utilize written contracts to establish the terms and conditions by which product support and services are sold to customers. Delivery is considered to have occurred when title and risk of loss have been transferred to the customer, which generally occurs after a license key has been delivered electronically to the customer.

We also recognize revenue from the sale of software licenses from contracts with multiple deliverables. These software license sales are evaluated under ASC 985-605, Software Revenue Recognition. Contracts with multiple element arrangements typically include, but are not limited to, components such as installation, training, licenses, and PCS listed in the contract. The Company concluded that vendor specific objective evidence does not exist for all elements of its software license sales. If a PCS or professional services element exists in the software license arrangement, revenue is recognized ratably over the longest service period. If no PCS or professional services element exists in the arrangement, revenue is deferred until the last undelivered element is delivered.

We recognize revenue under time and materials contracts primarily from the Nuclear Industry Training and Consulting segment and certain cost-reimbursable contracts. Revenue on time and material contracts is recognized as services are rendered and performed. Under a typical time-and-materials billing arrangement, customers are billed on a regularly scheduled basis, such as biweekly or monthly. Any unbilled amounts are typically billed the following

month. Under cost-reimbursable contracts, which are subject to a contract ceiling amount, we are reimbursed for allowable costs and paid a fee, which may be fixed or performance based. However, if costs exceed the contract ceiling or are not allowable under the provisions of the contract or applicable regulations, we may not be able to obtain reimbursement for all such costs.

9

---

## 2. Recent Accounting Pronouncements

### Accounting pronouncements recently adopted

In July 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-11, Simplifying the Measurement of Inventory (ASU 2015-11). ASU 2015-11 requires that an entity measure inventory at the lower of cost and net realizable value. This ASU does not apply to inventory measured using last-in, first-out. ASU 2015-11 was effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. We adopted ASU 2015-11 effective January 1, 2017. The adoption of this standard did not have a significant impact on our consolidated financial position, results of operations or cash flows.

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation: Topic 718: Improvements to Employee Share Based Accounting (ASU 2016-09). The new guidance is intended to simplify the accounting for share based payment award transactions. The amendments in the update include the following aspects for share based accounting: accounting for income taxes, classification of excess tax benefits on the statement of cash flows, forfeitures, minimum statutory tax withholding requirements, and classification of employee taxes paid on the statement of cash flows when an employer withholds shares for tax withholding purposes. The adoption of ASU 2016-09 was required for fiscal reporting periods beginning after December 15, 2016, including interim reporting periods within those fiscal years. We adopted ASU 2016-09 effective January 1, 2017. The adoption of this standard did not have a significant impact on our consolidated financial position, results of operations or cash flows.

### Accounting pronouncements not yet adopted

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (ASU 2014-09), which provides guidance for revenue recognition. The standard's core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies will need to use more judgment and make more estimates than under today's guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. This guidance will be effective for the Company for the fiscal year ending December 31, 2018, and interim periods therein, using either of the following transition methods: (i) a full retrospective approach reflecting the application of the standard in each prior reporting period with the option to elect certain practical expedients, or (ii) a retrospective approach with the cumulative effect of initially adopting ASU 2014-09 recognized at the date of adoption (which includes additional footnote disclosures). We are currently in the process of evaluating the impact of the adoption of this ASU on our consolidated financial statements and our method of adoption. The adoption is expected to impact our revenue recognition and related disclosures. For example, our revenue from software arrangements with multiple elements including services are currently recognized ratably due to the lack of vendor-specific objective evidence (VSOE) of fair value. We will be required to separate these performance obligations under these arrangements and recognize them as delivered.

In February 2016, the FASB issued ASU No. 2016-02, Leases. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The new standard is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. A modified retrospective transition approach is required for lessees with capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the consolidated financial statements, with certain practical expedients available. We are still evaluating the impact of the pending adoption of the new standard on the consolidated financial statements, and we expect that, upon adoption, the recognition of ROU assets and lease liabilities could be material.

In August 2016, the FASB issued ASU No. 2016-15, Classification of Certain Cash Receipts and Cash Payments (ASU-2016-15). The new guidance addresses eight specific cash flow issues and applies to all entities that are required to present a statement of cash flows. Adoption of ASU 2016-15 is required for fiscal reporting periods beginning after December 15, 2017, including interim reporting periods within those fiscal years. We are currently evaluating the potential impact of the adoption of ASU 2016-15 on our consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, Restricted Cash (ASU 2016-18). The new guidance applies to all entities that have restricted cash or restricted cash equivalents and are required to present a statement of cash flows. This update is intended to reduce diversity in cash flow presentation of restricted cash and restricted cash equivalents and requires entities to include all cash and cash equivalents, both restricted and unrestricted, in the beginning-of-period and end-of-period totals presented on the statement of cash flows. Adoption of ASU 2016-18 is required for fiscal reporting periods beginning after December 15, 2017, including interim reporting periods within those fiscal years. We are currently evaluating the potential impact of the adoption of ASU 2016-18 on our consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, Simplifying the Test for Goodwill Impairment (ASU 2017-04). ASU 2017-04 simplifies the accounting for goodwill impairment by eliminating Step 2 of the current goodwill impairment test, which required a hypothetical purchase price allocation. Goodwill impairment will now be the amount by which the reporting unit's carrying value exceeds its fair value, limited to the carrying value of the goodwill. ASU 2017-04 is effective for financial statements issued for fiscal years, and interim periods beginning after December 15, 2019. We are currently evaluating the potential impact of the adoption of ASU 2017-04 on our consolidated financial statements.



### 3. Basic and Diluted Earnings (Loss) per Common Share

Basic earnings (loss) per share is based on the weighted average number of outstanding common shares for the period. Diluted earnings (loss) per share adjusts the weighted average shares outstanding for the potential dilution that could occur if outstanding vested stock options were exercised.

The number of common shares and common share equivalents used in the determination of basic and diluted earnings (loss) per share were as follows:

(in thousands, except for share amounts)	Three months ended	
	March 31, 2017	2016
Numerator:		
Net (loss) income	\$(266	) \$138
Denominator:		
Weighted-average shares outstanding for basic (loss) income per share	19,094,382	17,912,045
Effect of dilutive securities:		
Stock options and restricted stock units	-	221,697
Adjusted weighted-average shares outstanding and assumed conversions for diluted (loss) income per share	19,094,382	18,133,742
Shares related to dilutive securities excluded because inclusion would be anti-dilutive	564,833	752,042

### 4. Contingent Consideration

Acquisitions may include contingent consideration payments based on future financial measures of an acquired company. Under ASC 805, Business Combinations, contingent consideration is required to be recognized at fair value as of the acquisition date. We estimate the fair value of these liabilities based on financial projections of the acquired companies and estimated probabilities of achievement. At each reporting date, the contingent consideration obligation is revalued to estimated fair value and changes in fair value subsequent to the acquisition are reflected in income or expense in the consolidated statements of operations, and could cause a material impact to our operating results. Changes in the fair value of contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue and/or earnings estimates and changes in probability assumptions with respect to the likelihood of achieving the various earn-out criteria.

As of March 31, 2017, and December 31, 2016, the contingent consideration totaled \$1.5 million and \$2.1 million, respectively. During the three months ended March 31, 2017 and 2016, the Company made payments of \$0.9 million and \$1.4 million, respectively, related to the liability-classified contingent consideration arrangement.

## 5. Contract Receivables

Contract receivables represent balances due from a broad base of both domestic and international customers. All contract receivables are considered to be collectible within twelve months. Recoverable costs and accrued profit not yet billed represent costs incurred and associated profit accrued on contracts that will become billable upon future milestones or completion of contracts.

The components of contract receivables are as follows:

(in thousands)	March 31, 2017	December 31, 2016
Billed receivables	\$5,971	\$ 13,325
Recoverable costs and accrued profit not yet billed	7,944	5,555
Allowance for doubtful accounts	(18 )	(17 )
Total contract receivables, net	\$13,897	\$ 18,863

During April 2017, the Company invoiced \$1.6 million of the unbilled amounts related to the balance at March 31, 2017.

As of March 31, 2017, the Company had one customer that accounted for 21% of the Company's consolidated contract receivables. As of December 31, 2016, the Company did not have any customers that accounted for more than 10% of the Company's consolidated contract receivables.

## 6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

(in thousands)	March 31, 2017	December 31, 2016
Inventory	\$2,158	\$ -
Income taxes receivable	380	446
Prepaid expenses	583	422
Other current assets	903	1,184
Total prepaid expenses and other current assets	\$4,024	\$ 2,052

At March 31, 2017, prepaid expenses and other current assets are comprised primarily of inventory that is being purchased to support the construction of three major nuclear simulation projects related to a significant contract that was executed during the first quarter of 2016. Inventory is recorded at the lower of cost or market value in accordance with ASC 330, Inventory. At December 31, 2016, inventory related to the simulation projects was classified as a long-term asset within other assets on the consolidated balance sheet. The earliest completion date of these projects is expected to occur in the first quarter of 2018.

## 7. Software Development Costs, Net

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, typically three years. On an annual basis, and more frequently as conditions indicate, the Company assesses the recovery of the unamortized software development costs by estimating the net undiscounted cash flows expected to be generated by the sale of the product. If the undiscounted cash flows are not sufficient to recover the unamortized software costs the Company will write-down the carrying amount of such asset to its estimated fair value based on the future discounted cash flows. The excess of any unamortized computer software costs over the related fair value is written down and charged to operations.

Software development costs capitalized were approximately \$29,000 and \$131,000 for the three months ended March 31, 2017 and 2016, respectively. Total amortization expense was approximately \$117,000 and \$81,000 for the three months ended March 31, 2017 and 2016, respectively.

## 8. Goodwill and Intangible Assets

The Company's intangible assets include amounts recognized in connection with business acquisitions, including goodwill, customer relationships, contract backlog, and software.

The Company reviews goodwill for impairment annually as of December 31 and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. The Company tests goodwill at the reporting unit level. A reporting unit is an operating segment, or one level below an operating segment, as defined by U.S. GAAP. After the acquisition of Hyperspring on November 14, 2014, the Company determined that it had two reporting units, which are the same as our two operating segments: (i) Performance Improvement Solutions; and (ii) Nuclear Industry Training and Consulting (which includes Hyperspring). As of March 31, 2017, and December 31, 2016, goodwill of \$5.6 million related to the Nuclear Industry Training and Consulting segment. No events or circumstances occurred during the current reporting period that would indicate impairment of such goodwill.

Amortization of intangible assets other than goodwill is recognized on a straight-line basis over the estimated useful life of the intangible assets, except for contract backlog and contractual customer relationships which are recognized in proportion to the related projected revenue streams. Intangible assets with definite lives are reviewed for impairment if indicators of impairment arise. The Company does not have any intangible assets with indefinite useful lives, other than goodwill. There were no indications of impairment of intangible assets other than goodwill during the current reporting period.

## 9. Fair Value of Financial Instruments

ASC 820, Fair Value Measurement ("ASC 820"), defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The levels of the fair value hierarchy established by ASC 820 are:

Level 1: inputs are quoted prices, unadjusted, in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2: inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. A Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: inputs are unobservable and reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability.

The Company considers the recorded value of certain of its financial assets and liabilities, which consist primarily of cash equivalents, accounts receivable and accounts payable, to approximate the fair value of the respective assets and liabilities at March 31, 2017, and December 31, 2016, based upon the short-term nature of the assets and liabilities.

For the three months ended March 31, 2017, the Company did not have any transfers between fair value Level 1, Level 2 or Level 3. The Company did not hold any non-financial assets or non-financial liabilities subject to fair value measurements on a recurring basis at March 31, 2017.

The following table presents assets and liabilities measured at fair value at March 31, 2017:

(in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Money market funds	\$ 12,145	\$ -	\$ -	\$ 12,145
Foreign exchange contracts	-	71	-	71
Total assets	\$ 12,145	\$ 71	\$ -	\$ 12,216
Foreign exchange contracts	\$ -	\$ (36 )	\$ -	\$ (36 )
Contingent consideration	-	-	(1,508 )	(1,508 )
Total liabilities	\$ -	\$ (36 )	\$ (1,508 )	\$ (1,544 )

Edgar Filing: GSE SYSTEMS INC - Form 10-Q

The following table presents assets and liabilities measured at fair value at December 31, 2016:

(in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Money market funds	\$ 16,435	\$ -	\$ -	\$ 16,435
Foreign exchange contracts	-	141	-	141
Total assets	\$ 16,435	\$ 141	\$ -	\$ 16,576
Foreign exchange contracts	\$ -	\$ (20 )	\$ -	\$ (20 )
Contingent consideration	-	-	(2,105 )	(2,105 )
Total liabilities	\$ -	\$ (20 )	\$ (2,105 )	\$ (2,125 )

The following table provides a roll-forward of the fair value of the contingent consideration categorized as Level 3 for the three months ended March 31, 2017:

(in thousands)

Balance, January 1, 2017	\$ 2,105
Payments made on contingent liabilities	(851 )
Change in fair value	254
Balance, March 31, 2017	\$ 1,508

## 10. Derivative Instruments

The Company utilizes forward foreign currency exchange contracts to manage market risks associated with the fluctuations in foreign currency exchange rates. It is the Company's policy to use such derivative financial instruments to protect against market risk arising in the normal course of business to reduce the impact of these exposures. The Company minimizes credit exposure by limiting counterparties to nationally recognized financial institutions.

As of March 31, 2017, the Company had foreign exchange contracts outstanding of approximately 281.4 million Japanese Yen, 0.2 million Euro, 0.4 million Australian Dollars, and 0.3 million Canadian Dollars at fixed rates. The contracts expire on various dates through December 2018. At December 31, 2016, the Company had contracts outstanding of approximately 281.4 million Japanese Yen, 0.1 million Euro, 0.6 million Australian Dollars, and 0.5 million Canadian Dollars at fixed rates.

The Company had not designated the foreign exchange contracts as hedges and recorded the estimated net fair values of the contracts on the consolidated balance sheets as follows:

(in thousands)	March 31, 2017	December 31, 2016
Asset derivatives		
Prepaid expenses and other current assets	\$ 27	\$ 57
Other assets	44	84
	71	141
Liability derivatives		
Other current liabilities	(36 )	(20 )
	(36 )	(20 )
Net fair value	\$ 35	\$ 121

The changes in the fair value of the foreign exchange contracts are included in loss on derivative instruments, net in the consolidated statements of operations.

The foreign currency denominated contract receivables, billings in excess of revenue earned and subcontractor accruals that are related to the outstanding foreign exchange contracts are remeasured at the end of each period into the functional currency using the current exchange rate at the end of the period. The gain or loss resulting from such remeasurement is also included in loss on derivative instruments, net in the consolidated statements of operations.

For the three months ended March 31, 2017 and 2016, the Company recognized a net loss on its derivative instruments as outlined below:

(in thousands)	Three months ended March 31,	
	2017	2016
Foreign exchange contracts - change in fair value	\$(86 )	\$(183)
Remeasurement of related contract receivables, and billings in excess of revenue earned	(74 )	65

Loss on derivative instruments, net	\$ (160)	\$ (118)
-------------------------------------	----------	----------

---

17

## 11. Stock-Based Compensation

The Company recognizes share-based payment expense for all equity-based awards issued to employees, directors and non-employees that are expected to vest. Share-based payment expense is based on the fair value of awards as of the grant date. The Company recognized \$614,000 and \$247,000 of share-based payment expense related to equity awards for the three months ended March 31, 2017 and 2016, respectively, under the fair value method. Offsetting this expense during the three months ended March 31, 2017, was a reduction in the fair value of cash-settled RSUs totaling approximately \$18,000.

During the three months ended March 31, 2017, the Company granted 223,802 time-based restricted stock units (RSUs) to employees with an aggregate fair value of \$783,000, of which a portion will vest quarterly in equal amounts over the course of eight quarters and the remainder will vest annually in equal amounts over the course of three years. During the three months ended March 31, 2016, the Company granted 129,824 time-based RSUs to employees with an aggregate fair value of \$286,000, which will vest quarterly in equal amounts over the course of eight quarters. The fair value of the time-based RSUs is expensed ratably over the requisite service period, which ranges from two to three years.

During the three months ended March 31, 2017, the Company did not grant performance-based RSUs. The Company granted 160,000 performance-based RSUs with an aggregate fair value of \$282,000 during the three months ended March 31, 2016. These RSUs vest upon the achievement of specific performance measures. The fair value of the performance-based RSUs is expensed ratably over the requisite service period, which ranges between one and four years.

The Company did not grant stock options during the three months ended March 31, 2017 and granted 40,000 stock options for the three months ended March 31, 2016. The aggregate fair value of the granted options at the grant date was \$46,000.

## 12. Debt

### Line of Credit

#### Citizens Bank

The Company entered into a new three-year, \$5.0 million revolving line of credit facility (RLOC) with Citizens Bank on December 29, 2016, to fund general working capital needs, including acquisitions. Working capital advances bear interest of LIBOR plus 2.25% per annum and letter of credit fees are 1.25% per annum. The Company is not required to maintain a restricted cash collateral account at Citizens Bank for outstanding letters of credit and working capital advances.

The maximum availability under the RLOC is subject to a borrowing base equal to 80% of eligible accounts receivable, and is reduced for any issued and outstanding letters of credit and working capital advances. At March 31, 2017, there were no outstanding borrowings on the RLOC and six letters of credit totaling \$1.7 million. The amount available at March 31, 2017, after consideration of the borrowing base, letters of credit and working capital advances was approximately \$1.8 million.

The credit facility agreement is subject to standard financial covenants and reporting requirements. At March 31, 2017, the Company was in compliance with its financial covenants.

#### BB&T Bank



At March 31, 2017, we had four letters of credit with BB&T totaling \$1.0 million, which we expect to terminate during the second quarter of 2017. At March 31, 2017, and December 31, 2016, the cash collateral account with BB&T totaled \$1.1 million and was classified as restricted cash on the consolidated balance sheets.

## 13. Product Warranty

The Company accrues for estimated warranty costs at the time the related revenue is recognized based on historical experience and projected claims. The Company's long-term contracts generally provide for a one-year warranty on parts, labor and any bug fixes as it relates to customized software embedded in the systems. The portion of the warranty provision expected to be incurred within 12 months is classified as current within accrued warranty and totals \$1.2 million, while the remaining \$0.4 million is classified as long-term within other liabilities. The activity in the accrued warranty accounts is as follows:

(in thousands)

Balance, January 1, 2017	\$1,478
Current period provision	235
Current period claims	(62 )
Currency adjustment	2
Balance, March 31, 2017	\$1,653

## 14. Income Taxes

The following table presents the provision for income taxes and the effective tax rates:

(\$ in thousands)	Three months ended March 31,	
	2017	2016
Provision for income taxes	\$73	\$88
Effective tax rate	(37.8%)	38.6%

The Company's movement in effective tax rate for 2017 as compared to 2016 resulted mainly from an increase in pre-tax loss in the U.S. The Company's income tax provision for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items arising in that quarter. Tax expense in both years is comprised mainly of foreign income tax expense, Alternative Minimum Tax, state taxes, and deferred tax expense relating to the tax amortization of goodwill.

Because of its net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from the year 1997 forward. The Company is subject to foreign tax examinations by tax authorities for years 2010 forward for Sweden, 2012 forward for China, and 2014 forward for both India and the UK.

An uncertain tax position taken or expected to be taken in a tax return is recognized in the consolidated financial statements when it is more likely than not (i.e., a likelihood of more than 50%) that the position would be sustained upon examination by tax authorities that have full knowledge of all relevant information. A recognized tax position is then measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement. Interest and penalties related to income taxes are accounted for as income tax expense. The Company recorded uncertain tax positions for certain foreign tax contingencies in China, South Korea, and Ukraine.

The Company recognizes deferred tax assets to the extent that it is believed that these assets are more likely than not to be realized. The Company has evaluated all positive and negative evidence and determined that it will continue to assess a full valuation allowance on its U.S., Swedish, U.K., and Chinese net deferred assets as of March 31, 2017. The Company has determined that it is more likely than not that it will realize the benefits of its deferred taxes in

India. In 2016, the Company paid income taxes in India and expects to do so again in 2017.

19

---

## 15. Segment Information

The Company has two reportable business segments. The Performance Improvement Solutions segment provides simulation, training and engineering products and services delivered across the breadth of industries we serve. Solutions include simulation for both training and engineering applications. Example training applications include turnkey and custom training services, while engineering services include plant design verification and validation. The Company provides these services across all market segments. Contracts typically range from 9 months to 24 months. The Company and its predecessors have been providing these services since 1976.

The Nuclear Industry Training and Consulting segment provides specialized workforce solutions primarily to the nuclear industry, working at clients' facilities. This business is managed through our Hyperspring subsidiary. The business model, management focus, margins and other factors clearly separate this business line from the rest of the GSE product and service portfolio. Hyperspring has been providing these services since 2005.

The following table sets forth the revenue and operating results attributable to each reportable segment and includes a reconciliation of segment revenue to consolidated revenue and operating results to consolidated income (loss) before income taxes:

(in thousands)	Three months ended March 31,	
	2017	2016
Revenue:		
Performance Improvement Solutions	\$9,670	\$8,843
Nuclear Industry Training and Consulting	6,672	4,133
	\$16,342	\$12,976
Operating income (loss):		
Performance Improvement Solutions	\$(738 )	\$(42 )
Nuclear Industry Training and Consulting	935	188
Change in fair value of contingent consideration, net	(254 )	69
Operating (loss) income	(57 )	215
Interest income, net	27	27
Loss on derivative instruments, net	(160 )	(118 )
Other (expense) income, net	(3 )	102
(Loss) income before income taxes	\$(193 )	\$226

## 16. Commitments and Contingencies

Westinghouse Electric Company ("Westinghouse") filed for Chapter 11 Bankruptcy protection on March 29, 2017. Westinghouse is a customer in our Performance Improvement Solutions segment. At March 31, 2017, the Company had approximately \$0.5 million in billed and unbilled pre-petition receivables attributable to Westinghouse. The Company has assessed the recoverability of these amounts and concluded that the likelihood of loss is not probable, and therefore, none of the outstanding amounts have been reserved at March 31, 2017.

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

GSE is a world leader in real-time high-fidelity simulation, providing a wide range of simulation, training, and engineering solutions to the global power and process industries. We provide customers with simulation, engineering and plant services that help clients reduce risks associated with operating their plants, increase revenue through improved plant and employee performance, and lower costs through improved operational efficiency. In addition, we provide services that systematically help clients fill key vacancies in the organization on a short-term basis, primarily in training professionals focused on regulatory compliance and certification in the nuclear power industry. At March 31, 2017, GSE was the parent company of:

GSE Performance Solutions, 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 Scottish limited liability company;  
EnVision Systems (India) Pvt. Ltd., an Indian limited liability company; and  
Hyperspring, LLC, an Alabama limited liability company.

The Company has a 50% interest in IntelliQlik, LLC, a Delaware limited liability company. The Company also has a 50% interest in General Simulation Engineering RUS LLC, a Russian closed joint-stock company, which we are currently in the process of winding down.

### Cautionary Statement Regarding Forward-Looking Statements

This report and the documents incorporated by reference herein contain "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") that are based on management's assumptions, expectations and projections about us, and the industry within which we operate, and that have been made pursuant to the Private Securities Litigation Reform Act of 1995 reflecting our expectations regarding our future growth, results of operations, performance and business prospects and opportunities. Wherever possible, words such as "anticipate", "believe", "continue", "estimate", "intend", "may", "plan", "potential", "predict", "expect", "should", "will" and similar expressions, or the negative of these terms or other comparable terminology, have been used to identify these forward-looking statements. These forward-looking statements may also use different phrases. These statements regarding our expectations reflect our current beliefs and are based on information currently available to us. Accordingly, these statements by their nature are subject to risks and uncertainties, including those listed under Item 1A - Risk Factors in our most recent annual report on Form 10-K, which could cause our actual growth, results, performance and business prospects and opportunities to differ from those expressed in, or implied by, these forward-looking statements. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. Except as otherwise required by federal securities law, we are not obligated to update or revise these forward looking statements to reflect new events or circumstances. We caution you that a variety of factors, including but not limited to the factors described under Item 1A - Risk Factors in our most recent annual report on Form 10-K, could cause our business conditions and results to differ materially from what is contained in forward-looking statements.

Other factors and assumptions not identified above were also involved in the formation of these forward-looking statements and the failure of such other assumptions to be realized, as well as other factors, may also cause actual results to differ materially from those projected. Most of these factors are difficult to predict accurately and are generally beyond our control. You should consider the areas of risk described in Item 1A - Risk Factors in our most recent annual report on Form 10-K in connection with any forward-looking statements that may be made by us. You should not place undue reliance on any forward-looking statements. New factors emerge from time to time, and it is not possible for us to predict which factors will arise.

We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any additional disclosures we make in proxy statements, quarterly reports on Form 10-Q and current reports on Form 8-K filed with the SEC.

## General Business Environment

We operate through two reportable business segments: Performance Improvement Solutions and Nuclear Industry Training and Consulting. Each segment focuses on delivering solutions to customers within our targeted markets - primarily the power and process industries. Marketing and communications, accounting, finance, legal, human resources, information systems and other administrative services are organized at the corporate level. Business development and sales resources are generally aligned with each segment to support existing customer accounts and new customer development. The following is a description of our business segments:

### Performance Improvement Solutions (approximately 59% of revenue)

Our Performance Improvement Solutions segment primarily encompasses our power plant high-fidelity simulation solutions, as well as engineering solutions and interactive computer based tutorials/simulation focused on the process industry. This segment includes various simulation products, engineering services, and operation training systems delivered across the industries we serve: primarily nuclear and fossil fuel power generation, as well as the process industries. Our simulation solutions include the following: (1) simulation software and services, including operator training systems, for the nuclear power industry, (2) simulation software and services, including operator training systems, for the fossil power industry, and (3) simulation software and services for the process industries used to teach fundamental industry processes and control systems to newly hired employees and for ongoing workforce development and training. GSE and its predecessors have been providing these services since 1976.

### Nuclear Industry Training and Consulting (approximately 41% of revenue)

Nuclear Industry Training and Consulting provides highly specialized and skilled nuclear operations instructors and other consultants to the nuclear power industry. These employees work at our clients' facilities under client direction. Examples of these highly skilled positions are senior reactor operations instructors, procedure writers, work management specialists, planners and training material developers. This business is managed through our Hyperspring subsidiary. The business model, management focus, margins and other factors clearly separate this business line from the rest of the Company's product and service portfolio. Hyperspring has been providing these services since 2005.

## Business Strategy

Our objective is to create a technology-enabled engineering, software and training services platform by capitalizing on near and long-term growth opportunities primarily in the nuclear industry. We offer our differentiated suite of products and services to adjacent markets such as fossil power and the process industries where our offerings are a natural fit with a clear and compelling value proposition for the market. Our primary growth strategy is twofold: (1) expand organically within our core markets by leveraging our market leadership position and drive increased usage and product adoption via new products and services, and (2) seek acquisitions to accelerate our overall growth in a manner that is complementary to our core business. To accomplish this, we will pursue the following activities:

Expand our total addressable market. Our focus on growth means introducing product capabilities or new product categories that create value for our customers and therefore expand our total addressable market. Currently we are working on initiatives to expand our solution offerings in both our business segments which may include, but not be limited to, the following: expanding our software product portfolio to the industries we serve with enhanced power and process simulation tools and systems that are complementary to our core offerings; delivering enhanced learning management systems/solutions; offering fully outsourced training solutions to our customers; adding work flow process improvement solutions; and tailoring operational reporting and business intelligence solutions to address the unique need of our end user markets.

Initiatives such as these will broaden our scope and enable us to engage more deeply with the segments we serve. Recently, we have delivered a compelling new solution, the GSE GPWR™ Generic Pressurized Water Reactor simulation technology, proving that our modeling technology can be sold via traditional license terms and conditions to the nuclear industry ecosystem. We have both upgraded and expanded the EnVision library of simulation and eLearning tutorials for the process industries with specific new products for training clients in the upstream segment of the oil and gas industry. We continue to provide cutting edge training systems by adapting our technology to systems to meet the specific needs of customers such as U.S. government laboratories.

Pursue strategic acquisitions opportunistically. We intend to complement our organic growth strategy through selective acquisitions of other software, technical engineering, and nuclear oriented training, staffing and consulting service businesses, both domestic and international. We are focusing our efforts on acquisitions that would enhance our existing portfolio of products and services, strengthen our relationships with our existing customers, and potentially expand our footprint to include new customers in our core served industries. We have made several acquisitions since 2010 and believe the opportunity exists to acquire businesses that are complementary to ours, allowing us to accelerate our growth strategy.

In January 2011, we acquired a software company called EnVision Systems Inc., which provided interactive multi-media tutorials and simulation models, primarily to the process industries. We have integrated the technology assets from this acquisition and expanded the firm's application to other industries, and we intend to repeat this successful process. In 2014, we acquired Hyperspring, which enabled GSE to offer highly skilled nuclear operations and consulting know-how on site at a large segment of our client base on an operational basis providing essential services. This deepened our relationship with existing clients and won business for us at new client sites in the nuclear industry. This acquisition has proven to be synergistic, enabling cross selling domestically, and in 2015, expanding these services internationally for the first time.

Research and development (R&D). We invest in R&D in order to deliver unique solutions that add value to our end-user markets. We have delivered nuclear core and Balance-of-Plant modeling and visualization systems to the industry. To address the nuclear industry's need for more accurate simulation of both normal and accident scenarios, we provide our DesignEP® and RELAP5-HD® solutions. Our entire JADE™ suite of simulation software, including industry leading JTOPMERET® and JElectric™ software, provides the most accurate simulation of Balance-of-Plant and electrical systems available to the nuclear and fossil plant simulation market. The significant enhancements we have made to our SimExec® and OpenSim™ platforms enables customers to be more efficient in the daily operation



of their simulators. We are bringing SimExec® and OpenSim™ together into a next generation unified environment that will add new capabilities as requested by clients and driven by market need.

We intend to continue to make prudent investments in R&D that first and foremost are driven by the market, and are complementary to advancing our growth strategy. Such investments in R&D may result in on-going enhancement of existing solutions as well as the creation of new solutions to serve our target markets, ensuring that we add greater value, in an easier to use fashion, than any alternative available to customers. GSE has pioneered a number of industry standards over our lifetime and will continue to be one of the most innovative companies in our industry.

Strengthen and develop our talent. Our experienced employees and management team are our most valuable resources. Attracting, training, and retaining top talent is critical to our success. To achieve our talent goals, we intend to remain focused on providing our employees with entrepreneurial opportunities to increase client contact within their areas of expertise and to expand our business within our service offerings. We will also continue to provide our employees with training, personal and professional growth opportunities, performance-based incentives including opportunities for stock ownership, bonuses and competitive benefits as benchmarked to our industry and locations.

Continue to deliver industry-recognized high quality services. We have developed a strong reputation for quality services based upon our industry-recognized depth of experience, ability to attract and retain quality professionals, and expertise across multiple service sectors. We have received many industry certificates and awards including being recognized for outstanding work on projects by Bechtel's Nuclear, Security & Environmental global business unit (NS&E) at the Bechtel Supply Chain Recognition awards in April 2016. In addition, we have a recognized high-value brand as one of the most respected providers of software and services to the industry, as evidenced by our marquee client base and significant market wins over the past year. A recently conducted survey of clients with projects underway and/or just delivered validates our brand with a Net Promoter Score of +65, a compelling score for an industrial technology and services company.

Expand international operations in selected markets. We believe there are additional opportunities for us to market our software and services to international customers, and to do so in a cost effective manner. For example, we believe partnerships with Value Added Resellers (VAR) could significantly expand our sales pipeline for the EnVision software suite. In 2016, we entered into a reseller agreement with an entity in the Middle East that has an established track record of success selling simulation and workforce development solutions to the process industries throughout the region. Such VARs may yield positive results for our pursuit of international nuclear opportunities globally (see industry trends below). We may explore the creation of appropriate joint ventures to target nuclear new-build programs in key growth regions.

Employees. As of March 31, 2017, we had approximately 286 employees, which includes approximately 174 in our Performance Improvement segment and 112 in our Nuclear Industry Training and Consulting segment. In addition, we have approximately 100 licensed engineers and other advanced degreed professionals. To date, we have been able to locate and engage highly qualified employees as needed and we expect our growth efforts to be addressed through attracting top talent.

Backlog. As of March 31, 2017, we had approximately \$79.6 million of total gross revenue backlog. Most of our contracts range from 9 to 24 months. With respect to our backlog, it includes only those amounts that have been funded and authorized and does not reflect the full amounts we may receive over the term of such contracts. Our backlog includes future expected revenue at contract rates, excluding contract renewals or extensions that are at the discretion of the client. We calculate backlog without regard to possible project reductions or expansions or potential cancellations unless and until such changes may occur.

Backlog is expressed in terms of gross revenue and, therefore, may include significant estimated amounts of third-party or pass-through costs to subcontractors and other parties. Because backlog is not a defined accounting term, our computation of backlog may not necessarily be comparable to that of our industry peers.

## Industry Trends

### Industry need for building and sustaining a highly skilled workforce

We believe a critical ongoing challenge facing the industries we serve is access to, and continued development of, a highly trained and efficient workforce. This challenge manifests primarily in two ways: the increasing pace of the knowledge and experience lost as a significant percentage of the existing experienced workforce reaches retirement age over the next several years; and the fact that as new power plants come on-line, there is an increased demand for more workers to staff and operate those plants in addition to the plants in the existing fleet.

According to Power Engineering magazine (December 2014), in the United States every sector in the energy industry is expected to lose a large percentage of its workforce within the next few years as baby boomers retire on the traditional schedule. The power sector alone will be forced to replace more than 100,000 skilled workers by 2018 simply to replace those retiring. The Nuclear Energy Institute estimates that 39% of the nuclear workforce will be eligible to retire by 2018. As the nuclear industry expands its fleet and strains to maintain the high standards of training the existing workforce, existing plant simulator systems, which provide these training services, are operating 24 hours a day. With workers retiring and the need to backfill as well as expand the workforce for new units, certain operators are exploring the opportunity to de-bottleneck their existing simulator capabilities through the creation of dual reference simulators.

Globally, as more people increase their standard of living, their demand for power will increase, which in turn will require the on-going construction of power plants to meet this surging demand. Developing a skilled labor force to operate these plants and keeping their skills current and their certifications in compliance with regulatory requirements is a key challenge facing the global power industry. Similar challenges face the process industries.

## Growing global power demand and the increasing emphasis on nuclear power

World Energy Outlook 2015 projects that electricity demand will increase by more than 70% over the time period from 2013 to 2040. At the same time, countries globally are pledging to reduce greenhouse gas emissions despite this growth in demand for power. These trends are increasingly favorable to nuclear power. The United Kingdom illustrates this trend, with a recently announced energy policy that places a much greater reliance on nuclear power and unveiled plans for a new nuclear fleet, while slashing subsidies for solar energy and seeking to phase out coal fired power plants. With plans to build at least three new nuclear plants, the UK plans to add 16GWe of new nuclear capacity operating by 2030 according to World Nuclear Association.

There are currently 59 nuclear plants under construction in 14 countries, including 21 in China, seven in Russia, five in India and four in the United Arab Emirates per the Nuclear Energy Institute. Four reactors are currently under construction in the U.S., two for Southern Nuclear at the Vogtle, Georgia site and two at SCANA's VC Summer site. Southern Nuclear and SCANA are currently determining how to complete these four reactors following the Westinghouse Bankruptcy. Tennessee Valley Authority's Watts Bar generating facility started operations in 2016, which represents a watershed for the U.S. nuclear power industry. Per the World Nuclear Association, there are 164 reactors in 25 countries in specific phases of planning that will be operating by 2030. This pace of construction is surpassing the peak construction velocity of the 1970s and 1980s.

In addition to new plants, generating more power through enhanced plant performance - especially reducing unplanned outage time - is a critical objective for the nuclear power industry to meet growing global electricity demand. Capacity factors, also known as load factors, have been greater than 90% in the U.S. in five of the seven years from 2007 to 2013. The U.S. is recognized as the leader in load factor performance. The U.S. accounts for nearly one-third of the world's nuclear electricity, highlighting its importance as a market as well as its need for high levels of performance.

For the existing nuclear U.S. fleet, there is recognition that these plants are essential to meeting goals of reducing carbon emissions even as renewable energy sources are introduced. This recognition of the importance of nuclear providing zero-carbon baseload is demonstrated most recently by the state of New York's Clean Energy Standard that values the emission-free energy of New York's nuclear fleet and in so doing providing an emissions-free subsidy of 1.7¢/kWh. This subsidy helps ensure the state's existing nuclear plants remain economically viable in an era of low cost natural gas and even with wind and solar receiving a subsidy of 4.5¢/kWh. In addition, the Illinois Legislature passed the Future Energy Jobs Bill on December 2, 2016, a measure that ensures the continued operation of the Clinton and Quad Cities nuclear power plants in that state. In a statement, the Nuclear Energy Institute said the bill's passage was a "remarkable moment" for the state and the nuclear industry. Gov. Bruce Rauner signed the bill into law on December 7, 2016. The Future Energy Jobs Bill provides Exelon and Commonwealth Edison with a \$235 million annual credit for the carbon-free energy produced by the Clinton and Quad Cities nuclear plants. The actions of New York and Illinois starts a trend which may continue to states such as Ohio, Pennsylvania, New Jersey and Connecticut to recognize the value of zero carbon power produced by nuclear plants in those states. This would be similar to how the Renewable Portfolio Standard was rolled out across more than half the states in the U.S. to recognize the benefits of zero carbon renewable power.

In regulated markets where the economy is growing, the nuclear fleet is profitable and expanding, with four reactors under construction in the southeast U.S. Longer term, the trends for nuclear power are favorable as well. The U.S. Department of Energy recently released a draft plan to double America's nuclear power capacity by 2050. The plan, dubbed "Vision 2050", promotes expanding America's nuclear capacity through advanced reactor designs including small and medium-size reactors.

As countries around the world recognize the importance of lowering carbon emissions from power generation, nuclear energy is an essential component of the solution. India and the UK have recently announced plans to significantly expand nuclear power generation capacity through new builds. China continues to aggressively build out its fleet. In

Japan, the strategic importance of nuclear power had led the Institute of Energy and Economics to estimate that 19 of Japan's temporarily shut down reactors will restart before March 2018.

We believe GSE is well positioned to take full advantage of these strategic global and domestic trends by providing high fidelity simulation and training solutions to the global power and process industries.

26

---

## Products and Services

### Performance Improvement Solutions

To assist our clients in creating world-class internal training and engineering improvement processes, we offer a set of integrated and scalable products and services which provide a structured program focused on continuous skills improvement for experienced employees to engineering services, which include plant design verification and validation. We provide the right solution to solve our clients' most pressing needs.

For workforce development and training, students and instructors alike must have a high degree of confidence that their power plant simulator truly reflects plant behavior across the entire range of operations. To achieve this, GSE's simulation solution starts with the most robust engineering approach possible. Using state-of-the-art modeling tools combined with our leading nuclear power modeling expertise, GSE provides simulation solutions that achieve unparalleled fidelity and accuracy. The solutions that GSE provides are also known for ease of use, resulting in increased productivity by end-users. For these reasons, GSE has delivered more nuclear power plant simulators than any other company in the world.

For virtual commissioning, designers of first-of-a-kind plants or existing plants need a highly accurate dynamic simulation platform to model a wide variety of design assumptions and concepts from control strategies to plant behavior to human factors. Because new builds and upgrades to existing plants result in new technology being deployed, often involving the integration of disparate technologies for the first time, a high-fidelity simulator allows designers to see the interaction between systems for the very first time. With our combination of simulation technology and expert engineering, GSE was chosen to build first-of-a-kind simulators for the AP1000, PBMR, and small modular reactors being built by NuScale, and mPower.

Examples of the types of simulators we sell include, but are not limited to, the following:

**Universal Training Simulators:** These products complement the Self-Paced Training Tutorials by reinforcing what the student learned in the tutorial, putting it into practice on the Universal Simulator. The simulation models are high fidelity and engineering correct, but represent a typical plant or typical process, rather than the exact replication of a client's plant. We have delivered over 250 such simulation models to clients consisting of major oil companies and educational institutions.

**Part-Task Training Simulators:** Like the Universal Simulators, we provide other unique training solutions such as a generic nuclear plant simulator and VPanel® displays, which replicate control room hardware and simulator solutions specific to industry needs such as severe accident models to train on and aid in the understanding of events like the Fukushima Daiichi accident.

**Plant-Specific Operator Training Simulators:** These simulators provide an exact replication of the plant control room and plant operations. They provide the highest level of realism and training and allow users to practice their own plant-specific procedures. Clients can safely practice startup, shutdown, normal operations, as well as response to abnormal events we all hope they never have to experience in real life. Since our inception, we have delivered nearly 450 plant-specific simulators to clients in the nuclear power, fossil power and process industries worldwide.

## Nuclear Industry Training and Consulting

As our customers' experienced staff retire, access to experts that can help train existing and new employees in how to operate their plants is essential to ensure safe ongoing plant operations. In addition, training needs change over time and sometimes our clients require specialized courses. Industry needs instructors who can step in and use the client's training material. Finding professional instructors, who know the subject, can teach it and can adapt to the client's culture, is critical. GSE provides both qualified instructors and turnkey courses that work within the client's system and complement the training methods they already have in place. Examples of our training program courses are senior reactor operator certification, generic fundamentals training, and simulation supervisor training. In addition, we also provide expert support through consulting or turnkey projects for the training material upgrade and development, outage execution, planning and scheduling, corrective actions programs, and equipment reliability.

We bring together the collection of skills we have amassed over more than 40 years beginning with its traditional roots in custom high fidelity simulation and training solutions for the power industries, extended through the acquisition of specialized engineering capabilities, enhanced by the entry and intermediate level training solutions of EnVision and the extensive nuclear industry training and consulting services of Hyperspring.

## Westinghouse bankruptcy

On March 29, 2017, Westinghouse, a customer of our Performance Improvement Solutions segment, filed for Chapter 11 bankruptcy protection in the United States Bankruptcy Court for the Southern District of New York, Case No. 17-10751. The U.S. Bankruptcy Court overseeing the Westinghouse Bankruptcy approved, on an interim basis, an \$800 million Debtor-in-Possession Financing Facility to allow Westinghouse to finance its business operations during the reorganization process. In April 2017, Southern Company and SCANA Corporation reached interim agreements with Westinghouse to continue construction on the Vogtle and V.C. Summer nuclear plants, respectively. Westinghouse also announced that it intends to continue projects in China, and that generally operations in Asia, Europe, the Middle East and Africa will not be affected by the bankruptcy filing.

At March 31, 2017, the Company had approximately \$0.5 million in billed and unbilled pre-petition receivables attributable to Westinghouse. The Company has assessed the recoverability of these amounts and concluded that the likelihood of loss is not probable, and therefore, none of the outstanding amounts have been reserved at March 31, 2017.

28

---

## 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 revenue:

(\$ in thousands)	Three months ended March 31,				
	2017	%	2016	%	
Revenue	\$16,342	100.0%	\$12,976	100.0%	
Cost of revenue	12,220	74.8 %	9,352	72.1 %	
Gross profit	4,122	25.2 %	3,624	27.9 %	
Operating expenses:					
Selling, general and administrative	3,592	22.0 %	2,757	21.2 %	
Research and development	402	2.4 %	354	2.7 %	
Restructuring charges	45	0.3 %	125	1.0 %	
Depreciation	76	0.5 %	100	0.8 %	
Amortization of definite-lived intangible assets	64	0.4 %	73	0.6 %	
Total operating expenses	4,179	25.6 %	3,409	26.3 %	
Operating (loss) income	(57 )	(0.4 )%	215	1.6 %	
Interest income, net	27	0.2 %	27	0.2 %	
Loss on derivative instruments, net	(160 )	(1.0 )%	(118 )	(0.9 )%	
Other (expense) income, net	(3 )	0.0 %	102	0.8 %	
(Loss) income before income taxes	(193 )	(1.2 )%	226	1.7 %	
Provision for income taxes	73	0.4 %	88	0.7 %	
Net (loss) income	\$(266 )	(1.6 )%	\$138	1.1 %	

## Results of Operations - Three Months ended March 31, 2017 versus Three Months ended March 31, 2016

Revenue. Revenue for the three months ended March 31, 2017 totaled \$16.3 million, which was 25.9% greater than the \$13.0 million of revenue for the three months ended March 31, 2016. The increase in revenue was primarily driven by the year over year increase in revenue at Hyperspring, represented by our Nuclear Industry Training and Consulting segment, depicted below.

(\$ in thousands)	Three months ended March 31,	
	2017	2016
Revenue:		
Performance Improvement Solutions	\$9,670	\$8,843
Nuclear Industry Training and Consulting	6,672	4,133
Total revenue	\$16,342	\$12,976



Performance Improvement Solutions revenue increased 9.4% primarily due to the continued work that is secured by our near-record backlog. We recorded total Performance Improvement Solutions orders of \$4.9 million and \$34.8 million for the three months ended March 31, 2017 and 2016, respectively.

Nuclear Industry Training and Consulting revenue increased 61.4% to \$6.7 million from \$4.1 million for the three months ended March 31, 2016 and 2017, respectively. The increase was primarily due to a year-over-year increase in customer staffing needs of a major customer. Nuclear Industry Training and Consulting orders totaled \$14.9 million and \$5.0 million for the three months ended March 31, 2017 and 2016, respectively.

At March 31, 2017, backlog was \$79.6 million: \$67.0 million for the Performance Improvement Solutions segment and \$12.6 million for Nuclear Industry Training and Consulting. At December 31, 2016, the Company's backlog was \$73.2 million: \$68.8 million for the Performance Improvement Solutions segment and \$4.4 million for Nuclear Industry Training and Consulting.

Gross profit. Gross profit was \$4.1 million, or 25.2%, for the three months ended March 31, 2017, compared to \$3.6 million, or 27.9% for the same period in 2016.

(\$ in thousands)	Three months ended			
	March 31,			
	2017	%	2016	%
Gross profit:				
Performance Improvement Solutions	\$3,044	31.5%	\$3,145	35.6%
Nuclear Industry Training and Consulting	1,078	16.2%	479	11.6%
Consolidated gross profit	\$4,122	25.2%	\$3,624	27.9%

The decrease in gross margin percentage for Performance Improvement Solutions for the three months ended March 31, 2017 as compared to the same period in 2016 was mainly due to three lower margin major nuclear simulation projects.

The increase in gross profit during 2017 for Nuclear Industry Training and Consulting was primarily driven by the segment's focus on entering higher margin contracts.

Edgar Filing: GSE SYSTEMS INC - Form 10-Q

Selling, general and administrative expenses. Selling, general and administrative (SG&A) expenses totaled \$3.6 million and \$2.8 million for the three months ended March 31, 2017 and 2016, respectively. Fluctuations in the components of SG&A spending were as follows:

(\$ in thousands)	Three months ended			
	March 31,			
	2017	%	2016	%
Selling, general and administrative expenses:				
Corporate charges	\$2,442	68.0 %	\$1,783	64.7 %
Business development	685	19.0 %	786	28.5 %
Contingent consideration	254	7.1 %	(69 )	(2.5 %)
Other	211	5.9 %	257	9.3 %
Total	\$3,592	100.0%	\$2,757	100.0%

Corporate charges increased \$0.7 million primarily due to higher stock-based compensation expense and higher professional fees.

Business development charges decreased slightly mainly due to lower headcount.

Contingent consideration increased \$0.3 million primarily due to fair value adjustments related to our 2014 Hyperspring acquisition. The contingent consideration liability expires in November 2017 with the final payment expected to be made in January 2018.

Other charges are primarily comprised of facility charges, which decreased \$46,000.

Research and development. Research and development costs consist primarily of software engineering personnel and other related costs. Research and development costs, net of capitalized software, totaled \$402,000 and \$354,000 for the three months ended March 31, 2017 and 2016, respectively. Before capitalization of software development costs, research and development totaled \$431,000 and \$485,000 for three months ended March 31, 2017 and 2016, respectively. The \$54,000 decrease is primarily due to a more targeted research and development strategy undertaken by the Company.

Restructuring charges. Restructuring charges totaled \$45,000 and \$125,000 for the three months ended March 31, 2017 and 2016, respectively. The decrease of \$80,000 is primarily due to the winding down of the Company's restructuring activities initiated during 2015.

Depreciation. Depreciation expense totaled \$76,000 and \$100,000 for the three months ended March 31, 2017 and 2016, respectively.

Amortization of definite-lived intangible assets. Amortization expense related to definite-lived intangible assets totaled \$64,000 and \$73,000 for the three months ended March 31, 2017, and 2016, respectively. The first quarter 2017 amortization expense decrease is primarily due to lower amortization of customer-related intangible assets that were recorded in conjunction with the Hyperspring acquisition in 2014.

Loss on derivative instruments, net. Loss on derivative instruments, net increased \$42,000, and relates to the Company's foreign exchange contracts and remeasurement of foreign currency-denominated contract receivables, billings in excess of revenue earned, and subcontractor accruals, that are remeasured into the functional currency using the current exchange rate at the end of the period.

For the three months ended March 31, 2017, we recognized a loss of \$86,000 on the change in fair value of foreign exchange contracts, compared to a loss of \$183,000 for the same period in 2016.

For the three months ended March 31, 2017, we recognized a loss of \$74,000 from the remeasurement of contract receivables, billings in excess of revenue earned and subcontractor accruals, compared to a gain of \$65,000 for the same period in 2016.

Other (expense) income, net. The Company recognized \$3,000 of other expense, net and \$102,000 of other income, net for the three months ended March 31, 2017 and 2016, respectively. The 2016 amount was primarily related to a \$101,000 refund of Value Added Tax that was received by our Chinese subsidiary that did not recur in the 2017 period.

Provision for income taxes. Income tax expense was \$73,000, or an effective income tax rate of (37.8%), for the three months ended March 31, 2017, compared to \$88,000, or an effective income tax rate of 38.6%, for the three months ended March 31, 2016. The Company's income tax provision for interim periods is determined using an estimate of its annual effective tax rate, adjusted for discrete items arising in that quarter. Tax expense in both years is comprised mainly of foreign income tax expense, alternative minimum tax, and deferred tax expense relating to the tax amortization of goodwill.

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. The Company is subject to foreign tax examinations by tax authorities for years 2010 and forward for Sweden, 2012 and forward for China, and 2014 and forward for both India and the UK.

An uncertain tax position taken or expected to be taken in a tax return is recognized in the consolidated financial statements when it is more likely than not (i.e., a likelihood of more than fifty percent) that the position would be sustained upon examination by tax authorities that have full knowledge of all relevant information. A recognized tax position is then measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Interest and penalties related to income taxes are accounted for as income tax expense. The Company has recorded uncertain tax positions for certain foreign tax contingencies in China, South Korea and the Ukraine.

The Company has a full valuation allowance on its U.S., U.K., Swedish, and Chinese net deferred tax assets at March 31, 2017.

#### Critical Accounting Policies and Estimates

In preparing the Company's consolidated financial statements, management makes several estimates and assumptions that affect the Company's reported amounts of assets, liabilities, revenues and expenses. Those accounting estimates that have the most significant impact on the Company's operating results and place the most significant demands on management's judgment include revenue recognition, impairment of intangible assets, including goodwill, capitalization of computer software development costs, valuation of contingent consideration for business acquisitions, and deferred income tax valuation allowance. These critical accounting policies and estimates are discussed in the Management's Discussion and Analysis of Financial Condition and Results of Operations section in our most recent Annual Report on Form 10-K. For all of these policies, management cautions that future events rarely develop exactly as forecast, and the best estimates may require adjustment.



## Liquidity and Capital Resources

As of March 31, 2017, the Company's cash and cash equivalents totaled \$21.6 million compared to \$21.7 million at December 31, 2016.

Cash provided by operating activities. For the three months ended March 31, 2017, net cash provided by operations totaled \$1.3 million. Significant changes in the Company's assets and liabilities in the three months ended March 31, 2017, included:

A \$4.9 million decrease in the Company's contract receivables, which is comprised of trade receivables and unbilled receivables. The Company's trade receivables, net of allowance for doubtful accounts, decreased approximately \$7.4 million primarily due to the collection of \$6.4 million in receivables during the first quarter of 2017 from a significant customer. At March 31, 2017, trade receivables outstanding for more than 90 days, net of the bad debt reserve, totaled approximately \$0.6 million as compared to \$0.3 million at December 31, 2016. The Company believes the entire 90-day balance at March 31, 2017, is collectible. The Company's unbilled receivables increased by approximately \$2.4 million to \$7.9 million at March 31, 2017, as compared to December 31, 2016. The increase in the unbilled receivables is due to the timing of contracted billing milestones of the Company's current projects, most of which relates to Hyperspring's largest customer. In April 2017, the Company invoiced \$1.6 million of the unbilled amounts; the remaining balance is expected to be invoiced and collected within one year.

A \$3.3 million decrease in billings in excess of revenue earned. The decrease is due to the timing of contracted billing milestones of the Company's current projects.

A \$1.2 million decrease in accounts payable, accrued compensation and accrued expenses. The decrease primarily reflects a decrease in Hyperspring accrued payroll due to the timing of their biweekly payroll cycle and the timing of payments made by the Company to vendors and subcontractors.

For the three months ended March 31, 2016, net cash provided by operations totaled \$1.6 million. Significant changes in the Company's assets and liabilities in the three months ended March 31, 2016, included:

A \$0.3 million decrease in the Company's contract receivables. The Company's trade receivables, net of the allowance for doubtful accounts, decreased from \$9.7 million at December 31, 2015 to \$7.6 million at March 31, 2016. At March 31, 2016, trade receivables outstanding for more than 90 days, net of the bad debt reserve, totaled approximately \$0.9 million as compared to \$0.6 million at December 31, 2015. The Company believes the entire 90-day balance at March 31, 2016, is collectible. The Company's unbilled receivables increased by approximately \$1.8 million to \$5.2 million at March 31, 2016 as compared to December 31, 2015. The increase in the unbilled receivables is due to the timing of contracted billing milestones of the Company's current projects. In April 2016, the Company invoiced \$1.8 million of the unbilled amounts; the balance is expected to be invoiced and collected within one year.

A \$1.2 million increase in accounts payable, accrued compensation and accrued expenses. The increase reflects an increase in Hyperspring accrued payroll due to the timing of their biweekly payroll cycle and timing of payments made by the Company to vendors and subcontractors.

Cash used in investing activities. Net cash used in investing activities totaled \$73,000 for the three months ended March 31, 2017. Capital expenditures totaled \$44,000 and capitalized software development costs totaled \$29,000.

Net cash used in investing activities totaled \$119,000 for the three months ended March 31, 2016. Capital expenditures totaled \$18,000 and capitalized software development costs totaled \$131,000 for the three months ended March 31, 2016. Proceeds from the sale of fixed assets totaled \$31,000.

Cash used in financing activities. Net cash used in financing activities totaled \$1.5 million for the three months ended March 31, 2017. During the three months ended March 31, 2017, the Company made payments of \$0.9 million to the former Hyperspring owners in accordance with the 2014 purchase agreement due to the achievement of certain EBITDA targets in 2016 and withheld approximately \$0.7 million in RSUs to pay employees' payroll withholding taxes.

Net cash used in financing activities totaled \$1.4 million for the three months ended March 31, 2016 due to payments of \$1.4 million to the former Hyperspring owners in accordance with the 2014 purchase agreement due to the achievement of certain EBITDA targets in 2015.

At March 31, 2017, the Company had cash and cash equivalents of \$21.6 million. The Company believes that its (i) cash and cash equivalents and (ii) cash generated from normal operations will be sufficient to fund its working capital and other requirements for at least the next twelve months.

#### Line of Credit

##### Citizens Bank

The Company entered into a new three-year, \$5.0 million revolving line of credit facility (RLOC) with Citizens Bank on December 29, 2016, to fund general working capital needs, including acquisitions. Working capital advances bear interest of LIBOR plus 2.25% per annum and letter of credit fees are 1.25% per annum. The Company is not required to maintain a restricted cash collateral account at Citizens Bank for outstanding letters of credit and working capital advances.

The maximum availability under the RLOC is subject to a borrowing base equal to 80% of eligible accounts receivable, and is reduced for any issued and outstanding letters of credit and working capital advances. At March 31, 2017, there were no outstanding borrowings on the RLOC and six letters of credit totaling \$1.7 million. The amount available at March 31, 2017, after consideration of the borrowing base, letters of credit and working capital advances was approximately \$1.8 million.

The credit facility agreement is subject to standard financial covenants and reporting requirements. At March 31, 2017, the Company was in compliance with its financial covenants.

##### BB&T Bank

At March 31, 2017, we had four letters of credit with BB&T totaling \$1.0 million, which we expect to terminate during the second quarter of 2017. At March 31, 2017 and December 31, 2016, the cash collateral account with BB&T totaled \$1.1 million and was classified as restricted cash on the consolidated balance sheets.

## Non-GAAP Financial Measures

EBITDA and Adjusted EBITDA are not measures of financial performance under generally accepted accounting principles (GAAP). Management believes EBITDA and Adjusted EBITDA, in addition to operating profit, net income and other GAAP measures, are useful to investors to evaluate the Company's results because it excludes certain items that are not directly related to the Company's core operating performance that may, or could, have a disproportionate positive or negative impact on our results for any particular period. Investors should recognize that EBITDA and Adjusted EBITDA might not be comparable to similarly-titled measures of other companies. This measure should be considered in addition to, and not as a substitute for or superior to, any measure of performance prepared in accordance with GAAP. A reconciliation of non-GAAP EBITDA and Adjusted EBITDA to the most directly comparable GAAP measure in accordance with SEC Regulation G follows:

	Three Months ended March 31,	
(in thousands)	2017	2016
Net (loss) income	\$(266)	\$138
Interest income, net	(27 )	(27 )
Provision for income taxes	73	88
Depreciation and amortization	140	173
EBITDA	(80 )	372
Loss (gain) from the change in fair value of contingent consideration	254	(69 )
Restructuring charges	45	125
Stock-based compensation expense	596	247
Consulting support for finance restructuring	-	78
Adjusted EBITDA	\$815	\$753



Adjusted Net Income and Adjusted EPS Reconciliation (in thousands, except per share amounts)

Adjusted Net Income and adjusted earnings (loss) per share (adjusted EPS) are not measures of financial performance under GAAP. Management believes adjusted net income and adjusted EPS, in addition to other GAAP measures, provide meaningful supplemental information regarding our operational performance. Our management uses Adjusted Net Income and other non-GAAP measures to evaluate the performance of our business and make certain operating decisions (e.g., budgeting, planning, employee compensation and resource allocation). This information facilitates management's internal comparisons to our historical operating results as well as to the operating results of our competitors. Since management finds this measure to be useful, we believe that our investors can benefit by evaluating both non-GAAP and GAAP results. These measures should be considered in addition to, and not as a substitute for or superior to, any measure of performance prepared in accordance with GAAP. A reconciliation of non-GAAP adjusted net income and adjusted EPS to GAAP net income, the most directly comparable GAAP financial measure, is as follows:

	Three Months ended March 31,	
	2017	2016
Net (loss) income	\$(266	) \$138
Loss (gain) from the change in fair value of contingent consideration	254	(69 )
Restructuring charges	45	125
Stock-based compensation expense	596	247
Consulting support for finance restructuring	-	78
Adjusted net income	\$629	\$519
Diluted (loss) earnings per common share	\$(0.01	) \$0.01
Adjusted earnings per common share – Diluted <sup>(a)</sup>	\$0.03	\$0.03
Weighted average shares outstanding – Diluted <sup>(a)</sup>	19,502,057	18,133,742

<sup>(a)</sup> During the three months ended March 31, 2017, the Company reported a GAAP net loss and positive adjusted net income. Accordingly, there were 407,675 dilutive shares from options and RSUs included in the adjusted earnings per common share calculation that were considered anti-dilutive in determining the GAAP diluted loss per common share.

Item 3. Quantitative and Qualitative Disclosure about Market Risk

Not required of a smaller reporting company.

Item 4. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by it in its reports filed or submitted pursuant to the Securities Exchange Act of 1934, as amended (the Exchange Act), is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange 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. At the end of the period covered by this report, an evaluation was performed under the supervision and with the participation of our management including our CEO and our CFO, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13-15(e) of the Exchange Act. Based on the evaluation of our disclosure controls and procedures as of March 31, 2017, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were not effective because of the material weakness identified below.

(b) Changes in Internal Control over Financial Reporting

As described in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2016, management assessed the effectiveness of the Company's internal control over financial reporting and concluded that they were not effective as of December 31, 2016, due to the fact that there was a material weakness in its internal control over financial reporting.

As of March 31, 2017, management concluded that additional work was still required to remediate control deficiencies over revenue recognition due to inadequate design and operation. As a result of this material weakness in our internal control over financial reporting, we performed additional review and analysis over our consolidated financial statements for the three months ended March 31, 2017. As a result of these procedures, we believe that our consolidated financial statements are presented in accordance with U.S. GAAP. We anticipate that we will complete the remediation of our controls over revenue recognition during 2017.

Except as described above, 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.

(c) Limitation of Effectiveness of Controls

Internal control over financial reporting has inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements will not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

None.

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, 2016.

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

None

Item 3. Defaults Upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

- 10.1 Employment Agreement between Bahram Meyssami and GSE Systems, Inc. dated as of December 1, 2015, filed herewith.
- 10.2 Restricted Share Unit Agreement between Bahram Meyssami and GSE Systems, Inc. dated as of December 1, 2015, filed herewith.
- 10.3 Amendment to Restricted Share Unit Agreement between Bahram Meyssami and GSE Systems, Inc. dated as of July 1, 2016, filed herewith.
- 31.1 Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes- Oxley Act of 2002, filed herewith.
- 31.2 Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, filed herewith.
- 32.1 Certification of the Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, filed herewith.

101.INS\* XBRL Instance Document

101.SCH\* XBRL Taxonomy Extension Schema

101.CAL\* XBRL Taxonomy Extension Calculation Linkbase

101.DEF\* XBRL Taxonomy Extension Definition Linkbase

101.LAB\* XBRL Taxonomy Extension Label Linkbase

101.PRE\* XBRL Taxonomy Extension Presentation Linkbase

38

---

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: May 15, 2017  
GSE SYSTEMS, INC.

/S/ KYLE J. LOUDERMILK

Kyle J. Loudermilk  
Chief Executive Officer  
(Principal Executive Officer)

/S/ EMMETT A. PEPE

Emmett A. Pepe  
Chief Financial Officer  
(Principal Financial and Accounting Officer)