

GSE SYSTEMS INC  
Form 10-Q  
November 14, 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 September 30, 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)

Emerging growth company

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 19,399,056 shares of common stock, with a par value of \$0.01 per share outstanding as of October 31, 2017.

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GSE SYSTEMS, INC.  
 QUARTERLY REPORT ON FORM 10-Q  
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## PART I - FINANCIAL INFORMATION

## Item 1. Financial Statements

## GSE SYSTEMS, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

	September 30, 2017	December 31, 2016
	(unaudited)	
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 15,525	\$21,747
Restricted cash	960	1,140
Contract receivables, net	18,616	18,863
Prepaid expenses and other current assets	2,956	2,052
Total current assets	38,057	43,802
Equipment, software, and leasehold improvements	7,149	6,759
Accumulated depreciation	(5,997)	(5,527)
Equipment, software, and leasehold improvements, net	1,152	1,232
Software development costs, net	756	982
Goodwill	7,130	5,612
Intangible assets, net	3,654	454
Other assets	289	1,574
Total assets	\$ 51,038	\$53,656
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 676	\$923
Accrued expenses	2,967	2,437
Accrued compensation	3,418	2,624
Billings in excess of revenue earned	16,131	21,444
Accrued warranty	1,260	1,137
Contingent consideration	1,691	2,105
Other current liabilities	867	716
Total current liabilities	27,010	31,386
Other liabilities	1,515	1,149
Total liabilities	28,525	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, 20,977,230 and 20,433,608 shares issued and 19,378,319 and 18,834,697 shares outstanding in 2017 and 2016	210	204
Additional paid-in capital	76,231	75,120
Accumulated deficit	(49,471)	(49,427)
Accumulated other comprehensive loss	(1,458)	(1,777)
Treasury stock at cost, 1,598,911 shares in 2017 and 2016	(2,999)	(2,999)

Total stockholders' equity	22,513	21,121
Total liabilities and stockholders' equity	\$ 51,038	\$ 53,656

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

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GSE SYSTEMS, INC. AND SUBSIDIARIES  
CONSOLIDATED STATEMENTS OF OPERATIONS

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

	Three months ended September 30, 2017		Nine months ended September 30, 2016	
Revenue	\$15,409	\$14,428	\$48,876	\$39,820
Cost of revenue	11,185	10,430	35,513	28,329
Gross profit	4,224	3,998	13,363	11,491
Operating expenses:				
Selling, general and administrative	4,374	2,936	11,740	8,606
Research and development	353	381	1,103	1,010
Restructuring charges	-	85	45	487
Depreciation	79	91	254	294
Amortization of definite-lived intangible assets	50	72	148	219
Total operating expenses	4,856	3,565	13,290	10,616
Operating (loss) income	(632)	433	73	875
Interest income, net	15	11	60	52
Gain (loss) on derivative instruments, net	71	(211)	226	(346)
Other income (expense), net	33	15	(4)	112
(Loss) income before income taxes	(513)	248	355	693
Provision for income taxes	92	80	399	275
Net (loss) income	\$(605)	\$168	\$(44)	\$418
Basic (loss) earnings per common share	\$(0.03)	\$0.01	\$0.00	\$0.02
Diluted (loss) earnings per common share	\$(0.03)	\$0.01	\$0.00	\$0.02

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		Nine months ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Net (loss) income	\$(605)	\$168	\$(44)	\$418
Foreign currency translation adjustment	192	(50)	319	(152)
Comprehensive (loss) income	\$(413)	\$118	\$275	\$266

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	-	-	1,793	-	-	-	-	1,793
Common stock issued for options exercised	160	2	274	-	-	-	-	276
Common stock issued for RSUs vested	383	4	(4)	-	-	-	-	-
Vested RSU shares withheld to pay taxes	-	-	(952)	-	-	-	-	(952)
Foreign currency translation adjustment	-	-	-	-	319	-	-	319
Net income	-	-	-	(44)	-	-	-	(44)
Balance, September 30, 2017	20,977	\$210	\$ 76,231	\$ (49,471)	\$ (1,458)	(1,599)	\$(2,999)	\$22,513

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

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

	Nine months ended September 30, 2017	2016
Cash flows from operating activities:		
Net (loss) income	\$ (44)	\$ 418
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation	254	294
Amortization of definite-lived intangible assets	148	219
Amortization of capitalized software development costs	352	296
Change in fair value of contingent consideration	436	(370)
Stock-based compensation expense	1,873	900
Bad debt expense	118	-
(Gain)/loss on derivative instruments, net	(226)	346
Deferred income taxes	78	96
Loss on sale of equipment, software, and leasehold improvements	-	3
Changes in assets and liabilities:		
Contract receivables, net	5,318	(3,616)
Prepaid expenses and other assets	770	(269)
Accounts payable, accrued compensation, and accrued expenses	(911)	2,254
Billings in excess of revenue earned	(5,204)	3,183
Accrued warranty	112	(80)
Other liabilities	359	208
Cash provided by operating activities	3,433	3,882

Cash flows from investing activities:		
Proceeds from sale of equipment, software and leasehold improvements	-	30
Capital expenditures	(64)	(53)
Capitalized software development costs	(126)	(196)
Acquisition of Absolute Consulting, Inc., net of cash acquired	(8,455)	-
Restrictions of cash as collateral under letters of credit	-	(4)
Releases of cash as collateral under letters of credit	180	254
Cash (used in) provided by investing activities	(8,465)	31
Cash flows from financing activities:		
Proceeds from issuance of common stock on the exercise of stock options	276	594
Contingent consideration payments to Hyperspring, LLC	(850)	(1,421)
RSUs withheld to pay taxes	(952)	-
Cash used in financing activities	(1,526)	(827)
Effect of exchange rate changes on cash	336	(77)
Net (decrease) increase in cash and cash equivalents	(6,222)	3,009
Cash and cash equivalents at beginning of year	21,747	11,084
Cash and cash equivalents at end of period	\$ 15,525	\$ 14,093

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

GSE SYSTEMS, INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
(Unaudited)

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. 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 statements of operations. In addition, the Company also reclassified the stock-based compensation related to management/employees from cost of revenue and research and development expenses to selling, general and administrative expenses.

The Company has two reportable segments as follows:

Performance Improvement Solutions (approximately 62% 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 38% of revenue)

Nuclear Industry Training and Consulting provides highly specialized and skilled nuclear operations instructors, procedure writers, technical engineers, 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, project managers, work management specialists, planners and training material developers. This business is managed through our subsidiaries Hyperspring and Absolute Consulting, Inc. 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. GSE and its predecessors have been providing these services since 1997.

On September 20, 2017, the Company acquired Absolute Consulting, Inc., now a wholly-owned subsidiary of GSE Performance Solutions, Inc., for \$8.9 million. Absolute Consulting, Inc. is a provider of technical consulting and staffing solutions to the global nuclear power industry and employs approximately 200 professionals with expertise in procedures writing, engineering, technical support, project management, training, project controls, and corrective actions. This acquisition brings a natural adjacency to GSE, fits well with our growth strategy, and benefits our customers from expanded capabilities and offerings. For reporting purposes, Absolute Consulting, Inc. was aggregated with Hyperspring into our Nuclear Industry Training and Consulting segment due to similarities in services provided including training and staff augmentation to the nuclear energy sector. In addition, both entities will report to the same management team and share support staff such as sales, recruiting and business development. As such, 100% of the goodwill acquired was allocated to the Nuclear Industry Training and Consulting segment.

Financial information about the two business segments is provided in Note 16 of the accompanying condensed 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, allowance for doubtful accounts, product warranties, 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 primarily 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 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.

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## 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 the last-in, first-out method. 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 Payment 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. 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 are currently evaluating these arrangements under the new revenue guidance to identify the distinct performance obligations and to determine the timing and pattern of recognition of each performance obligation. We are also evaluating other revenue streams, including power plant simulator design and build systems and training services. The Company will adopt the new standard on January 1, 2018 using the modified retrospective method.

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.

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In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses, which introduces new guidance for credit losses on instruments within its scope. The new guidance introduces an approach based on expected losses to estimate credit losses on certain types of financial instruments, including, but not limited to, trade and other receivables, held-to-maturity debt securities, loans and net investments in leases. The new guidance also modifies the impairment model for available-for-sale debt securities and requires the entities to determine whether all or a portion of the unrealized loss on an available-for-sale debt security is a credit loss. The standard also indicates that entities may not use the length of time a security has been in an unrealized loss position as a factor in concluding whether a credit loss exists. The ASU is effective for public companies for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted for all entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the effects, if any, that the adoption of this guidance will have on the Company's consolidated financial position, results of operations and cash flows.

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. 2017-01, Business Combinations: Clarifying the definition of a Business, which amends the current definition of a business. Under ASU 2017-01, to be considered a business, an acquisition would have to include an input and a substantive process that together significantly contributes to the ability to create outputs. ASU 2017-01 further states that when substantially all of the fair value of gross assets acquired is concentrated in a single asset (or a group of similar assets), the assets acquired would not represent a business. The new guidance also narrows the definition of the term "outputs" to be consistent with how it is described in ASC 606, Revenue from Contracts with Customers. The changes to the definition of a business will likely result in more acquisitions being accounted for as asset acquisitions. ASU 2017-01 is effective for acquisitions commencing on or after June 30, 2019, with early adoption permitted. Adoption of this guidance will be applied prospectively on or after the effective date.

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.

In May 2017, the FASB issued ASU No. 2017-09, Compensation – Stock Compensation (ASU 2017-09). The new guidance is intended to provide clarity and reduce both (1) diversity in practice and (2) cost and complexity when applying the guidance on ASC 718, Compensation – Stock Compensation. Entities are required to apply modification

accounting for any change to an award, except for a change that is deemed to be purely administrative in nature. ASU 2017-09 provides guidance about which changes to the terms or conditions of a share-based award require an entity to apply modification accounting in ASC 718. The amendments in this update are effective for all entities and for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted. The amendments in this update should be applied prospectively to an award modified on or after the adoption date. We do not expect the adoption of this standard to have a significant impact on our consolidated financial position, results of operations or cash flows.

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## 3. Basic and Diluted Earnings per Common Share

Basic (loss) earnings per share is based on the weighted average number of outstanding common shares for the period. Diluted (loss) earnings 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 per share were as follows:

(in thousands, except for share amounts)	Three months ended		Nine months ended	
	September 30, 2017	2016	September 30, 2017	2016
Numerator:				
Net (loss) income	\$(605)	\$168	\$(44)	\$418
Denominator:				
Weighted-average shares outstanding for basic (loss) income per share	19,280,770	18,230,148	19,204,778	18,052,019
Effect of dilutive securities:				
Stock options and restricted stock units	-	239,969	-	235,851
Adjusted weighted-average shares outstanding and assumed conversions for diluted (loss) income per share	19,280,770	18,470,117	19,204,778	18,287,870
Shares related to dilutive securities excluded because inclusion would be anti-dilutive	534,833	734,833	550,218	741,862

#### 4. Acquisition

On September 20, 2017, GSE, through its wholly-owned subsidiary GSE Performance Solutions, Inc. ("Performance Solutions"), acquired 100% of the capital stock of Absolute Consulting, Inc. ("Absolute") for \$8.8 million pursuant to the Stock Purchase Agreement by and among Performance Solutions and the sellers of Absolute. The purchase price was subject to a customary working capital adjustment resulting in total consideration of \$8.9 million (subject to post-closing adjustment). An indemnification escrow of \$1.0 million was funded from the cash paid to the sellers and is available to GSE and Performance Solutions to satisfy indemnification claims until September 20, 2019. The acquisition of Absolute was completed on an all-cash transaction basis.

Absolute is a provider of technical consulting and staffing solutions to the global nuclear power industry. Located in Navarre, Florida, Absolute has established long-term relationships with blue-chip customers primarily in the nuclear power industry. The acquisition of Absolute is expected to strengthen the Company's global leadership in nuclear training and consulting solutions, add new capacities to our technical consulting and staffing solutions offerings and bring highly complementary customers, while deepening relationships with existing clients.

The following table summarizes the consideration paid to acquire Absolute and the preliminary fair value of the assets acquired and liabilities assumed at the date of the transaction. Due to the recent completion of the acquisition of Absolute, the Company recorded the assets acquired and liabilities assumed at their preliminary estimated fair value. As of September 30, 2017, the Company had not finalized the determination of the fair value allocated to various assets and liabilities, including, but not limited to, contract receivables, prepaid expenses and other current assets, property, and equipment, intangible assets, accrued expenses, accrued compensation and the residual amount allocated to goodwill. The following amounts except for Cash are all reflected in the Consolidated Statement of Cash Flow within the "Acquisition of Absolute Consulting, Inc., net of cash acquired" line caption.

(in thousands)

Total purchase price	\$8,910
Purchase price allocation:	
Cash	\$455
Contract receivables	5,121
Prepaid expenses and other current assets	70
Property, and equipment, net	102
Intangible assets	3,340
Accounts payable, accrued expenses, and other liabilities	(78)
Accrued compensation	(1,618)
Total identifiable net assets	7,392
Goodwill	1,518
Net assets acquired	\$8,910

The goodwill is primarily attributable to the additional capacities to offer broader solutions to new and existing customers and the expected enhanced cost and growth synergies as a result of the acquisition. The total amount of goodwill that is expected to be tax deductible is \$1.5 million. All of the \$1.5 million of goodwill was assigned to our Nuclear Industry Training and Consulting segment. As discussed above, the goodwill amount is provisional pending receipt of the final valuations for various assets and liabilities.

The fair value of the assets acquired includes gross trade receivables of \$5.1 million, of which the Company expects to collect in full. GSE did not acquire any other class of receivable as a result of the acquisition of Absolute.

The Company identified \$3.3 million of other intangible assets, including customer relationships, trademarks/names and non-compete agreements, with amortization periods of three to five years. The fair values of the intangible assets are provisional pending receipt of the final valuations for those assets.



Unaudited Pro Forma Financial Information

The acquired business contributed revenue of \$1.2 million and earnings of \$36,000 to GSE for the period from September 20, 2017 to September 30, 2017. The following unaudited pro forma summary presents consolidated information of GSE as if the business combination had occurred on January 1, 2016. The unaudited pro forma financial information was prepared based on historical financial information.

These pro forma amounts have been calculated after applying GSE's accounting policies and adjusting the results of Absolute to reflect the additional amortization that would have been charged assuming the fair value adjustments to intangible assets had been applied from January 1, 2016, with the consequential tax effects. In 2017, GSE has incurred \$0.5 million of acquisition-related costs. These expenses are included in general and administrative expense on GSE's consolidated statements of operations and are reflected in pro forma earnings for the nine months ended September 30, 2016, in the table below. The pro forma financial information is not intended to reflect the actual results of operations that would have occurred if the acquisition had been completed on January 1, 2016, nor is it intended to be an indication of future operating results.

	Three months ended September 30, 2017		Nine months ended September 30, 2016	
	2017	2016	2017	2016
	(unaudited and in thousands)			
Revenue	\$23,055	\$24,097	\$77,470	\$70,175
Net (loss) income	(293)	241	448	(69)

## 5. Contingent Consideration

Acquisitions may include contingent consideration payments based on future financial measures of an acquired company. Under ASC 805, "Business Combination", 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 September 30, 2017 and December 31, 2016, contingent consideration, related to our acquisition of Hyperspring via an earnout, included in current liabilities totaled \$1.7 million and \$2.1 million, respectively. The Company made a payment of \$0.9 million and \$1.4 million in the first quarter of 2017 and 2016, respectively, related to the liability-classified contingent consideration arrangements. As of November 14, 2017, we will not record contingent consideration adjustments for the Hyperspring acquisition due to the expiration of the earnout period.

## 6. 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)	September 30, 2017	December 31, 2016
Billed receivables	\$ 12,039	\$ 13,325
Recoverable costs and accrued profit not yet billed	6,715	5,555
Allowance for doubtful accounts	(138)	(17)
Total contract receivables, net	\$ 18,616	\$ 18,863

During October 2017, the Company invoiced \$4.6 million of the unbilled amounts related to the balance at September 30, 2017.

As of September 30, 2017, the Company had one customer that accounted for 26.3% 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.

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. During the second quarter of 2017, Westinghouse assumed one of our contracts related to Southern Nuclear Company. Therefore, we have not recorded a reserve for outstanding receivables related to this contract. On July 31, 2017, South Carolina Electric and Gas Company announced that it will cease construction of new nuclear plants at the V.C. Summer Nuclear Station, one of the facilities for which the Company has an executory contract with Westinghouse for the provision of simulator software and equipment. Although there has been no formal rejection of

the contract as part of the Westinghouse bankruptcy process, GSE now considers it likely that Westinghouse will reject the parties' contract pertaining to the V.C. Summer Nuclear Station. Therefore, at June 30, 2017, GSE reserved 100% of accounts receivable, unbilled receivables, and billings in excess related to the V.C. Summer Nuclear Station, resulting in a net bad debt charge of \$118,000.

At September 30, 2017, in addition to the foregoing amounts associated with the V.C. Summer Nuclear Station, the Company had approximately \$0.1 million in net billed and unbilled pre-petition receivables attributable to Westinghouse. The Company has assessed the recoverability of the remaining \$0.1 million in net billed and unbilled pre-petition receivables and concluded that the likelihood of loss is not probable, and therefore, none of the remaining outstanding amounts have been reserved at September 30, 2017.

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## 7. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

(in thousands)	September 30, 2017	December 31, 2016
Inventory	\$ 1,159	\$ -
Income taxes receivable	268	446
Prepaid expenses	451	422
Other current assets	1,078	1,184
Total prepaid expenses and other current assets	\$ 2,956	\$ 2,052

At September 30, 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 sheets. The earliest completion date of these projects is expected to occur in the second quarter of 2018.

## 8. 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 \$38,000 and \$126,000 for the three and nine months ended September 30, 2017, respectively, and \$10,000 and \$196,000 for the three and nine months ended September 30, 2016, respectively. Total amortization expense was \$118,000 and \$352,000 for the three and nine months ended September 30, 2017, respectively, and \$111,000 and \$296,000 for the three and nine months ended September 30, 2016, respectively.

## 9. Goodwill and Intangible Assets

The Company's intangible assets include amounts recognized in connection with business acquisitions, including customer relationships, trade names, non-compete agreements, 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 and Absolute). As of the report date, the Company is still evaluating the impact of the Absolute acquisition on our reporting units. As of September 30, 2017, and December 31, 2016, goodwill of \$7.1 million and \$5.6 million, respectively, is related to the Nuclear Industry Training and Consulting segment. The increase of \$1.5 million in the carrying amount of goodwill during the nine months ended September 30, 2017 was due to the acquisition of Absolute. No events or circumstances occurred during the current reporting period that would indicate impairment of such goodwill and indefinite-lived intangible assets.

As discussed in Note 4, we recognized finite-lived intangible assets of \$3.3 million upon acquisition of Absolute on September 20, 2017. Amortization of finite-lived intangible assets 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 during the current reporting period.

## 10. 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 September 30, 2017, and December 31, 2016, based upon the short-term nature of the assets and

liabilities.

For the three and nine months ended September 30, 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 September 30, 2017.

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The following table presents assets and liabilities measured at fair value at September 30, 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	\$ 3,238	\$ -	\$ -	\$3,238
Foreign exchange contracts	-	280	-	280
Total assets	\$ 3,238	\$ 280	\$ -	\$3,518
Foreign exchange contracts	\$ -	\$ -	\$ -	\$-
Contingent consideration	-	-	(1,691)	(1,691)
Total liabilities	\$ -	\$ -	\$ (1,691)	\$(1,691)

Money market funds at both September 30, 2017 and December 31, 2016 are included in cash and cash equivalents in the respective consolidated balance sheets.

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 nine months ended September 30, 2017:

(in thousands)

Balance, January 1, 2017	\$2,105
Payments made on contingent liabilities	(850)
Change in fair value	436
Balance, September 30, 2017	\$1,691



## 11. 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 September 30, 2017, the Company had foreign exchange contracts outstanding of approximately 212.5 million Japanese Yen, 0.2 million Euro, and 0.2 million Australian 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 has 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:

	September 30, 2017	December 31, 2016
(in thousands)		
Asset derivatives		
Prepaid expenses and other current assets	\$ 133	\$ 57
Other assets	147	84
	280	141
Liability derivatives		
Other current liabilities	-	(20)
	-	(20)
Net fair value	\$ 280	\$ 121

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

For the three and nine months ended September 30, 2017 and 2016, the Company recognized a net gain (loss) on its derivative instruments as outlined below:

	Three months ended September 30, 2017	2016	Nine months ended September 30, 2017	2016
(in thousands)				

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Foreign exchange contracts-change in fair value	\$74	\$(125)	\$145	\$(302)
Remeasurement of related contract receivables, billings in excess of revenue earned, and subcontractor accruals	(3)	(86)	81	(44)
Gain (loss) on derivative instruments, net	\$71	\$(211)	\$226	\$(346)

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## 12. Stock-Based Compensation

The Company recognizes compensation expense for all equity-based compensation awards issued to employees and directors that are expected to vest. Compensation cost is based on the fair value of awards as of the grant date. The Company recognized \$0.5 million and \$0.4 million of stock-based compensation expense related to equity awards for the three months ended September 30, 2017 and 2016, respectively, and recognized \$1.8 million and \$0.9 million of stock-based compensation expense related to equity awards for the nine months ended September 30, 2017 and 2016, respectively. In addition to the equity-based compensation expense recognized, the Company also recognized \$92,000 and \$80,000 of stock-based compensation related to the change in the fair value of cash-settled restricted stock units ("RSUs") during the three and nine months ended September 30, 2017, respectively.

For the three and nine months ended September 30, 2017, the Company did not grant market-based RSUs. For the three and nine months ended September 30, 2016, the Company granted 1,162,500 and 1,322,500 market-based RSUs with an aggregate fair value of \$1.6 million and \$1.9 million, respectively. In accordance with ASC 718, Compensation - Stock Compensation, the RSUs are considered market-based because they vest upon the achievement of a specified price of the Company's shares. The fair value of the RSUs is expensed ratably over the requisite service period, which ranges between one and five years.

The market-based RSUs granted during 2016 include 450,000 RSUs, which were canceled and reissued in accordance with the Chief Executive Officer's amended employment agreement dated July 1, 2016 and approved by the Board of Directors. The aggregate fair value of the RSUs reissued totaled \$469,000.

Additionally, on July 1, 2016, the Board of Directors approved an amendment to the market-based RSU agreements with other employees, which reduced the time period from 90 to 30 consecutive trading days during which the volume weighted-average price ("VWAP") target must be attained in order for the RSUs to vest. This change resulted in an increase in the fair value of the RSUs granted of approximately \$250,000, which will be expensed ratably over the remaining requisite service period.

During the three months ended September 30, 2017, the Company did not grant time-based RSUs. For the nine months ended September 30, 2017, the Company granted 396,677 time-based RSUs with an aggregate fair value of \$1.4 million. A portion of the RSUs vested immediately, a portion will vest quarterly in equal amounts over the course of eight quarters, a portion will vest one year after grant, and the remainder will vest annually in equal amounts over the course of three years. For the three and nine months ended September 30, 2016, the Company granted 70,000 and 204,824 time-based RSUs with an aggregate fair value of \$172,300 and \$471,650, respectively. The fair value of the RSUs is expensed ratably over the requisite service period.

The Company did not grant stock options during the three or nine month periods ended September 30, 2017. The Company did not grant any options during the three month period ended September 30, 2016, and granted 40,000 stock options during the nine month period ended September 30, 2016. The fair value of the options granted during the nine months ended September 30, 2016 was \$46,000.

## 13. Debt

## Line of Credit

Citizens Bank

The Company entered into a 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 one-month 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 September 30, 2017, there were no outstanding borrowings on the RLOC and six letters of credit totaling \$1.7 million. We have two letters of credit with Citizen Bank totaling \$0.4 million, which have expired and are pending release by the bank and customer. The amount available at September 30, 2017, after consideration of the borrowing base, letters of credit and working capital advances was approximately \$3.3 million.

The credit facility agreement is subject to standard financial covenants and reporting requirements. At September 30, 2017, the Company was in compliance with its financial covenants.

BB&T Bank

At September 30, 2017, the Company had three letters of credit with BB&T totaling \$0.9 million, which have expired and are pending release by the bank and customer. At September 30, 2017 and December 31, 2016, the cash collateral account with BB&T totaled \$1.0 million and \$1.1 million, respectively. The balances were classified as restricted cash on the consolidated balance sheets.

## 14. 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 \$1.3 million, while the remaining \$0.5 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	474
Current period claims	(194)
Currency adjustment	11
Balance at September 30, 2017	\$1,769

## 15. Income Taxes

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

(in thousands)	Three months ended September 30,		Nine months ended September 30,	
	2017	2016	2017	2016
Provision for income taxes	\$92	\$80	\$399	\$275
Effective tax rate	(17.9)%	32.3%	112.4 %	39.7%

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 periods 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 2011 forward for Sweden, 2014 forward for China, and 2015 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 September 30, 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.

## 16. 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 nine 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 and newly acquired Absolute subsidiaries. The business model, management focus, margins and other factors clearly separate this business line from the rest of the GSE product and service portfolio. The Company and its predecessors have been providing these services since 1997.

On September 20, 2017, the Company acquired Absolute Consulting, Inc., now a wholly-owned subsidiary of GSE Performance Solutions, Inc., for \$8.9 million. Absolute Consulting, Inc. is a provider of technical consulting and staffing solutions to the global nuclear power industry and employs approximately 200 professionals with expertise in procedures writing, engineering, technical support, project management, training, project controls, and corrective actions. This acquisition brings a natural adjacency to GSE, fits well with our growth strategy, and benefits our customers from expanded capabilities and offerings. For reporting purposes, Absolute Consulting, Inc. was aggregated with Hyperspring into our Nuclear Industry Training and Consulting segment due to similarities in services provided including training and staff augmentation to the nuclear energy sector. In addition, both entities will report to the same management team and share support staff such as sales, recruiting and business development. As such, 100% of the goodwill acquired was allocated to the Nuclear Industry Training and Consulting segment.

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 before income taxes:

(in thousands)	Three months ended		Nine months ended	
	September 30, 2017	2016	September 30, 2017	2016
Revenue:				
Performance Improvement Solutions	\$8,737	\$10,215	\$30,093	\$27,382
Nuclear Industry Training and Consulting	6,672	4,213	18,783	12,438
	15,409	14,428	48,876	39,820
Operating income:				
Performance Improvement Solutions	(1,545)	(413)	(1,885)	(890)
Nuclear Industry Training and Consulting	1,052	321	2,394	1,395
Change in fair value of contingent consideration, net	(139)	525	(436)	370
Operating (loss) income	(632)	433	73	875
Interest income, net	15	11	60	52
Gain (loss) on derivative instruments, net	71	(211)	226	(346)
Other income (expense), net	33	15	(4)	112

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(Loss) income before income taxes	\$ (513)	\$ 248	\$ 355	\$ 693
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## 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.

On September 20, 2017, the Company acquired Absolute Consulting, Inc., now a wholly-owned subsidiary of GSE Performance Solutions, Inc., for \$8.9 million (subject to a customary post-closing working capital adjustment). Absolute Consulting, Inc. is a provider of technical consulting and staffing solutions to the global nuclear power industry and employs approximately 200 professionals with expertise in procedures writing, engineering, technical support, project management, training, project controls, and corrective actions. This acquisition brings a natural adjacency to GSE, fits well with our growth strategy, and benefits our customers from expanded capabilities and offerings.

### 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 62% 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 38% of revenue)

Nuclear Industry Training and Consulting provides highly specialized and skilled nuclear operations instructors, procedure writers, technical engineers, 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, project managers, work management specialists, planners and training material developers. This business is managed through Hyperspring and the newly acquired Absolute subsidiaries. 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. GSE and its predecessors have been providing these services since 1997.

## Business Strategy

Our objective is to provide a powerful technology-enabled engineering and training/consulting services platform for 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) seek acquisitions to accelerate our overall growth in a manner that is complementary to our core business and (2) expand organically within our core markets by leveraging our market leadership position and drive increased usage and product adoption via new products and services. To accomplish this, we will pursue the following activities:

Pursue strategic acquisitions opportunistically. We intend to complement our organic growth strategy through selective acquisitions of other technical engineering as well as training, staffing and consulting service businesses focused on the power industry, value added components for the nuclear industry, and software utilized in the power industry, 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, the expansion of these offerings to international customers for the first time. In September 2017, we acquired Absolute, a provider of technical consulting and staffing solutions to the global nuclear power industry, located in Navarre, Florida. The acquisition of Absolute is expected to strengthen the Company's global leadership in nuclear training and consulting solutions and add new capacities to solution offering and bring highly complementary customers, while deepening GSE relationships with existing clients. The acquisition of Absolute is a significant proof point of the thesis that GSE is a compelling platform for consolidating a fragmented vendor ecosystem for nuclear power. The acquisition adds significant scale and focus to the business, while positioning GSE as a "go to" provider of consulting solutions to the power industry, in particular nuclear power.

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.

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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 September 30, 2017, we had approximately 476 employees, which includes approximately 184 in our Performance Improvement segment and 292 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 September 30, 2017, we had approximately \$76.4 million of total gross revenue backlog, which included \$51.8 million of Performance Improvement Solutions backlog and \$24.6 million of Nuclear Industry Training and Consulting backlog, \$12.7 million of which was attributable to the Absolute acquisition. 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 at which industry knowledge and experience are lost as a significant percentage of the existing experienced workforce reaches retirement age 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.

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 a critical environment for training services, are often 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.

According to the US Energy & Employment Report released in January 2017, the employment in the traditional energy and energy efficiency sectors increased by 55% in 2016, adding 300,000 net new jobs. Electric power generation companies project a 7% growth in 2017 and the Nuclear Energy Institute projects 20,000 new position will be needed in the nuclear industry over the next 5 years.

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.

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

On September 28, 2017, United States Secretary of Energy, Rick Perry, directed the nation's federal grid regulator to create rules recognizing the critical value generated by nuclear power plants. The Notice of Proposed Rulemaking stated that the Federal Energy Regulatory Commission must order grid operators to increase how they value "reliability and resilience attributes" in energy generation. All licensed nuclear power plants and a significant portion of existing coal plants can meet those requirements today.

This would represent one of the most sweeping changes to the U.S. electricity supply market in the past two decades, and could be implemented before the coming winter heating season. The bottom line of this proposal is that eligible power sources will be able to participate in a details-to-be-determined rate structure that allows the owner to recover its "fully allocated costs" plus a "fair return on equity". If adopted, this would be terrific news for the nuclear power industry.

In addition, Secretary Perry announced a separate action to support and accelerate the development of new nuclear plants with conditional commitments of up to \$3.7 billion in loan guarantees to the owners of the Vogtle nuclear power plant in Georgia. Secretary Perry stated, "I believe the future of nuclear energy in the United States is bright and look forward to expanding American leadership in innovative nuclear technologies." "Advanced nuclear energy projects like Vogtle are the kind of important energy infrastructure projects that support a reliable and resilient grid, promote economic growth, and strengthen our energy and national security".

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 60 nuclear plants under construction in 16 countries, including 20 in China, seven in Russia, five in India and four in the United Arab Emirates per the Nuclear Energy Institute. Two reactors are currently under construction in the U.S. While SCANA stated it is discontinuing building its two reactors at the Summer Nuclear Power Site in South Carolina, Southern Nuclear is building two reactors at its Vogtle, Georgia site. With that said, the CEO of Santee Cooper, an owner of the Summer Nuclear Power Site, publicly stated in September 2017 he believes the plant could be completed at some point in the future. There is precedent in the US with TVA's Watt's Barr unit 2 being completed after a period of pause. Per the World Nuclear Association, there are 160 reactors in 23 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.

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 two 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, five reactors have restarted and up to 10 more should restart by end of March 2019 according to the Institute of Energy Economics, Japan.

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.

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## 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 operate and 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. The 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 include senior reactor operator certification, generic fundamentals training, and simulation supervisor training. In addition, we also provide expert support through consulting or turnkey projects for procedure writing, technical engineers, project managers, 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 Absolute and 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. During the second quarter of 2017, Westinghouse assumed one of our contracts related to Southern Nuclear Company. Therefore, we have not recorded a reserve for outstanding receivables related to this contract. On July 31, 2017, South Carolina Electric and Gas Company announced that it will cease construction of new nuclear plants at the V.C. Summer Nuclear Station, one of the facilities for which the Company has an executory contract with Westinghouse for the provision of simulator software and equipment. Although there has been no formal rejection of the contract as part of the Westinghouse bankruptcy process, GSE now considers it likely that Westinghouse will reject the parties' contract pertaining to the V.C. Summer Nuclear Station. Therefore, at June 30, 2017, GSE reserved 100% of accounts receivable, unbilled receivables, and billings in excess related to the V.C. Summer Nuclear Station, resulting in a net bad debt charge of \$118,000.

At September 30, 2017, in addition to the foregoing amounts associated with the V.C. Summer Nuclear Station, the Company had approximately \$0.1 million in net billed and unbilled pre-petition receivables attributable to Westinghouse. The Company has assessed the recoverability of the remaining \$0.1 million in net billed and unbilled pre-petition receivables and concluded that the likelihood of loss is not probable, and therefore, none of the remaining outstanding amounts have been reserved at September 30, 2017.

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## 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 September 30,				Nine months ended September 30,			
	2017	%	2016	%	2017	%	2016	%
Revenue	\$15,409	100.0 %	\$14,428	100.0 %	\$48,876	100.0 %	\$39,820	100.0 %
Cost of revenue	11,185	72.6 %	10,430	72.3 %	35,513	72.7 %	28,329	71.1 %
Gross profit	4,224	27.4 %	3,998	27.7 %	13,363	27.3 %	11,491	28.9 %
Operating expenses:								
Selling, general and administrative	4,374	28.4 %	2,936	20.3 %	11,740	24.0 %	8,606	21.6 %
Research and development	353	2.3 %	381	2.6 %	1,103	2.4 %	1,010	2.5 %
Restructuring charges	-	0.0%	85	0.6%	45	0.1%	487	1.2%
Depreciation	79	0.5 %	91	0.6 %	254	0.5 %	294	0.7 %
Amortization of definite-lived intangible assets	50	0.3 %	72	0.5 %	148	0.3 %	219	0.5 %
Total operating expenses	4,856	31.5 %	3,565	24.7 %	13,290	27.2 %	10,616	26.7 %
Operating (loss) income	(632)	(4.1)%	433	3.0%	73	0.1%	875	2.2%
Interest income, net	15	0.1 %	11	0.1 %	60	0.1 %	52	0.1 %
Gain (loss) on derivative instruments, net	71	0.5%	(211)	(1.5)%	226	0.5%	(346)	(0.9)%
Other income (expense), net	33	0.2%	15	0.2%	(4)	0.0%	112	0.3%
(Loss) income before income taxes	(513)	(3.3)%	248	1.7%	355	0.7%	693	1.7%
Provision for income taxes	92	0.6%	80	0.7%	399	0.8%	275	0.7%
Net (loss) income	\$(605)	(3.9)%	\$168	1.2%	\$(44)	(0.1)%	\$418	1.0%

Results of Operations - Three and nine months ended September 30, 2017, versus three and nine months ended September 30, 2016

Revenue. Total revenue for the three months ended September 30, 2017, increased 6.8% greater compared to the three months ended September 30, 2016. For the nine months ended September 30, 2017, revenue increased 22.7% compared to the nine months ended September 30, 2016. The increase in revenue was primarily driven by the year over year increase in revenue in the Nuclear Industry Training and Consulting segment, as described below.

(in thousands)	Three months ended		Nine months ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Revenue:				
Performance Improvement Solutions	\$8,737	\$10,215	\$30,093	\$27,382
Nuclear Industry Training and Consulting	6,672	4,213	18,783	12,438
Total revenue	\$15,409	\$14,428	\$48,876	\$39,820

Performance Improvement Solutions revenue decreased approximately \$1.5 million or 14.5% during the three months ended September 30, 2017, compared to the same period in the prior year. Additionally, total new orders for this segment were \$2.9 million during the three months ended September 30, 2017, a decrease of \$7.3 million when compared to the \$10.2 million in the new orders during the three months ended September 30, 2016. The decrease in new orders in the three months ended September 30, 2017, is primarily due to timing difference, a few key orders slipped into the fourth quarter. The decrease in revenues is primarily due to a decline in revenues from our foreign subsidiaries of approximately \$0.8 million. In addition, we recorded a revenue adjustment of approximately \$0.5 million related to a customer contract, due to an expected change order, which was offset by a similar adjustment to cost of revenue.

For the nine months ended September 30, 2017, Performance Improvement Solutions revenue was \$30.1 million compared to \$27.4 million for the nine months ended September 30, 2016. However, we recorded total orders of \$12.0 million during the nine months ended September 30, 2017, compared to \$50.7 million in the nine months ended September 30, 2016. The increase in revenue for the nine months ended September 30, 2017 compared to the prior year is mainly driven by an additional \$7.4 million in revenues from a major customer per the large contract executed in the first quarter of 2016. Excluding this customer, revenues were down \$4.7 million compared to the prior year. This decrease was primarily due to a \$2.3 million decrease in revenues from foreign subsidiaries as well as several large contracts that were completed in 2016 and only partially backfilled by new orders in 2017.

For the three months ended September 30, 2017, Nuclear Industry Training and Consulting revenue increased \$2.5 million, or 58.4% compared to the three months ended September 30, 2016. Total orders for this segment were \$6.3 million in the three months ended September 30, 2017, compared to \$3.6 million in the prior year. Absolute contributed \$1.2 million of revenues to the current year increase. Hyperspring's largest customer contributed \$1.5 million of increased revenues compared to the prior year.

For the nine months ended September 30, 2017, Nuclear Industry Training and Consulting revenue increased \$6.3 million, or 51.0% compared to the nine months ended September 30, 2016. We recorded total orders of \$25.1 million in the nine months ended September 30, 2017, compared to \$12.1 million in the nine months ended September 30, 2016. The \$6.3 million increase was primarily attributable to the acquisition of Absolute, which contributed \$1.2 million of revenues to the current year increase, as well as Hyperspring's largest customer, which contributed \$6.4 million of increased revenues compared to the prior year.

At September 30, 2017, backlog was \$76.4 million: \$51.8 million for the Performance Improvement Solutions business segment and \$24.6 million for Nuclear Industry Training and Consulting, \$12.7 million of which was attributable to Absolute. At December 31, 2016, the Company's backlog was \$73.2 million: \$68.8 million for the Performance Improvement Solutions business segment and \$4.4 million for Nuclear Industry Training and Consulting. Excluding Absolute, total backlog decreased approximately \$9.5 million from \$73.2 million at December 31, 2016 to \$63.7 million at September 30, 2017. The decrease in backlog is primarily due to 2016 backlog that was converted to revenues during 2017 and has only been partially backfilled by new orders. Excluding Absolute, Nuclear Industry Training and Consulting's backlog increased \$7.5 million during 2017 primarily due to increased orders from Hyperspring's two largest customers.

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Gross Profit. Gross profit totaled \$4.2 million for the three months ended September 30, 2017, compared to \$4.0 million for the same period in 2016. As a percentage of revenue, gross profit decreased from 27.7% for the three months ended September 30, 2016, to 27.4% for the three months ended September 30, 2017. For the nine months ended September 30, 2017, gross profit was \$13.4 million compared to \$11.5 million for the same period in 2016. As a percentage of revenue, gross profit decreased from 28.9% for the nine months ended September 30, 2016, to 27.3% for the nine months ended September 30, 2017.

(in thousands)	Three months ended September 30,				Nine months ended September 30,			
	2017	%	2016	%	2017	%	2016	%
Gross profit:								
Performance Improvement Solutions	\$2,904	33.2 %	\$3,507	34.3 %	\$10,337	34.3 %	\$9,871	36.0 %
Nuclear Industry Training and Consulting	1,320	19.8 %	491	11.7 %	3,026	16.1 %	1,620	13.0 %
Consolidated gross profit	\$4,224	27.4 %	\$3,998	27.7 %	\$13,363	27.3 %	\$11,491	28.9 %

The year over year decrease in gross profit percentage for Performance Improvement Solutions during 2017 was primarily driven by three major nuclear simulation projects with lower margin.

The year over year increase in Nuclear Industry Consulting and Training gross profit percentage for 2017 was primarily driven by the change in the mix of projects with higher margins, which reflected the segment's focus on entering higher margin contracts.

Selling, General and Administrative Expenses. Selling, general and administrative ("SG&A") expenses totaled \$4.4 million in the three months ended September 30, 2017, a 49.0% increase from the \$2.9 million for the same period in 2016. For the nine months ended September 30, 2017 and 2016, SG&A expenses totaled \$11.7 million and \$8.6 million, respectively. Fluctuations in the components of SG&A spending were as follows:

(in thousands)	Three months ended		Nine months ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Corporate charges	\$3,245	\$2,381	\$8,287	\$5,785
Business development	773	802	2,250	2,378
Facility operation & maintenance ("O&M")	213	262	645	785
Bad debt expense	-	-	118	-
Contingent consideration accretion	139	(525)	436	(370)
Other	4	16	4	28
Total	\$4,374	\$2,936	\$11,740	\$8,606

Corporate charges increased from \$2.4 million for the three months ended September 30, 2016, to \$3.2 million for the three months ended September 30, 2017. The increase was primarily driven by the acquisition-related expenses of \$0.5 million and an increase of \$0.2 million in stock-based compensation in 2017. For the nine months ended September 30, 2017 and 2016, corporate charges increased from \$5.8 million to \$8.3 million. The increase was primarily due to higher stock-based compensation expenses of \$0.9 million, acquisition-related expenses of \$0.5 million, higher professional fees of \$0.5 million, and higher realized foreign currency exchange losses of \$0.2 million.

Business development expense decreased \$29,000 and \$128,000 for the three and nine months ended September 30, 2017, respectively, compared to the same periods in 2016. This was mainly due to lower headcount.

Facility O&M expenses totaled \$213,000 and \$262,000 for the three months ended September 30, 2017 and 2016, respectively. For the nine months ended September 30, 2017 and 2016, the facility O&M expenses totaled \$645,000 and \$785,000, respectively. The decrease in 2017 was mainly due to the sublease of a portion of our Sykesville location and the closing of our Georgia office at the end of 2016.

We recorded bad debt expense of \$118,000 for the nine months ended September 30, 2017. We did not record bad debt expense for the three and nine months ended September 30, 2016. On July 31, 2017, South Carolina Electric and Gas Company announced that it would cease construction of new nuclear plants at the V.C. Summer Nuclear Station, one of the facilities for which the Company has an executory contract with Westinghouse for the provision of simulator software and equipment. Although there has been no formal rejection of the contract as part of the Westinghouse bankruptcy process, GSE considered it likely that Westinghouse would reject the parties' contract pertaining to the V.C. Summer Nuclear Station. Therefore, at June 30, 2017, GSE reserved 100% of accounts receivable, unbilled receivables, and billings in excess related to the V.C. Summer Nuclear Station, resulting in a net bad debt charge of \$118,000.

Contingent consideration expense mainly reflected the fair value adjustments related to our November 2014 Hyperspring acquisition. The contingent consideration expenses totaled \$139,000 and \$436,000 for the three and nine months ended September 30, 2017, respectively. For the three and nine months ended September 30, 2016, we recorded contingent consideration accretion income of \$525,000 and \$370,000, respectively. The increase in contingent consideration expenses primarily reflected better performance for Hyperspring in 2017.



Research and Development Expenses. Research and Development ("R&D") expenses totaled \$0.4 million for the three months ended September 30, 2017 and 2016, respectively. For the nine months ended September 30, 2017 and 2016, R&D expenses totaled \$1.1 million and \$1.0 million, respectively.

Restructuring Charges. There were no restructuring charges during the three months ended September 30, 2017, compared to \$0.1 million for the three months ended September 30, 2016. For the nine months ended September 30, 2017 and 2016, restructuring charges totaled \$45,000 and \$487,000, respectively. The decrease in restructuring charges in 2017 was primarily due to nearing completion on the Company's restructuring activities initiated during 2015.

Depreciation. Depreciation expense totaled \$0.1 million for each of the three months ended September 30, 2017 and 2016. For each of the nine months ended September 30, 2017 and 2016, depreciation expense totaled \$0.3 million.

Amortization of Definite-lived Intangible Assets. Amortization expense related to definite-lived intangible assets totaled \$50,000 and \$72,000 for the three months ended September 30, 2017 and 2016, respectively. For the nine months ended September 30, 2017 and 2016, amortization expense related to definite-lived intangible assets totaled \$148,000 and \$219,000, respectively. The decrease in amortization of definite-lived intangible assets in 2017 was primarily due to lower amortization of customer-related intangible assets that were recorded in conjunction with the Hyperspring acquisition in 2014.

Gain (Loss) on Derivative Instruments, Net. The Company periodically enters into forward foreign exchange contracts to manage market risks associated with the fluctuations in foreign currency exchange rates on foreign-denominated trade receivables. As of September 30, 2017, the Company had foreign exchange contracts outstanding of approximately 212.5 million Japanese Yen, 0.2 million Euro and 0.2 million Australian Dollars at fixed rates. The contracts expire on various dates through December 2018. The Company has not designated the contracts as cash flow hedges and has recognized a gain on the change in the estimated fair value of the contracts of \$74,000 and \$145,000 for the three and nine months ended September 30, 2017, respectively.

As of September 30, 2016, the Company had foreign exchange contracts outstanding of approximately 341.4 million Japanese Yen, 1.6 million Euro, 0.7 million Australian Dollars, and 0.5 million Canadian Dollars at fixed rates. The contracts expired on various dates through June 2017. The Company had not designated the contracts as hedges and had recognized a loss of \$125,000 and \$302,000 for the three and nine months ended September 30, 2016, respectively.

The foreign currency denominated contract receivables, billings in excess of revenue earned, and subcontractor accruals that are related to the outstanding foreign exchange contracts were remeasured into the functional currency using the current exchange rate at the end of the period. For the three and nine months ended September 30, 2017, the Company recognized a loss of \$3,000 and a gain of \$81,000, respectively. For the three and nine months ended September 30, 2016, the Company recognized a loss of \$86,000 and \$44,000, respectively.

Other Income (Expense), Net. For the three and nine months ended September 30, 2017, the Company recognized other income, net, of \$33,000 and other expense, net, of \$4,000, respectively. For the three and nine months ended September 30, 2016, the Company recognized other income, net, of \$15,000 and \$112,000, respectively. During the first quarter of 2016, the Company's Chinese subsidiary received a \$101,000 refund of Value Added Tax.

## Provision for Income Taxes

Income tax expense was \$92,000 and \$399,000 with effective income tax rates of (17.9)% and 112.4% for the three and nine months ended September 30, 2017, respectively. This is compared to income tax expense of \$80,000 and \$275,000 with effective income tax rates of 32.3% and 39.7%, for the three and nine months ended September 30, 2016, respectively. 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 periods 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 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 2011 and forward for Sweden, 2014 and forward for China, and 2015 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 recorded a full valuation allowance for its U.S., U.K., Swedish, and Chinese net deferred tax assets at September 30, 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, allowance for doubtful accounts, 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 September 30, 2017, the Company's cash and cash equivalents totaled \$15.5 million compared to \$21.7 million at December 31, 2016.

For the nine months ended September 30, 2017 and 2016, net cash provided by operating activities was \$3.4 million and \$3.9 million, respectively. The year over year decrease in cash flows provided by operating activities was primarily driven by increased revenues during 2017, primarily driven by our two largest customers and contributing approximately \$1.8 million of additional gross profit; an increase of \$0.9 million in operating expenses (excluding non-cash operating expenses), mainly due to acquisition related expenses, increased headcount and higher professional fees; a decrease of \$0.1 million in other income for the nine months ended September 30, 2017; finally, we had net inflows of \$0.4 million from changes in net working capital during the nine months ended September 30, 2017 compared to net working capital inflows of \$1.7 million during the same period in 2016. This \$1.3 million decrease in inflows from net working capital primarily reflects the timing difference of the operating expenditure payments.

Net cash used by investing activities totaled \$8.5 million for the nine months ended September 30, 2017, compared to net cash provided in investing activities was \$31,000 in the prior year. The significant cash outflow in 2017 was primarily driven by the acquisition of Absolute. The net cash consideration for the acquisition was \$8.5 million.

For the nine months ended September 30, 2017 and 2016, net cash used in financing activities totaled \$1.5 million and \$0.8 million, respectively. The increase in the cash outflow from financing activities is largely driven by the Company withholding RSUs in order to pay employees' payroll withholding taxes on vested RSUs totaling approximately \$1.0 million and a \$0.3 million decrease in proceeds received from stock option exercises, partially offset by a \$0.6 million decrease in contingent consideration payments to the former Hyperspring owners in 2017.

At September 30, 2017, the Company had cash and cash equivalents of \$15.5 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 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 one-month 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 September 30, 2017, there were no outstanding borrowings on the RLOC and six letters of credit totaling \$1.7 million, two of which expired and are pending on release by the bank and customer. The amount available at September 30, 2017, after consideration of the borrowing base, letters of credit and working capital advances was approximately \$3.3 million.

The credit facility agreement is subject to standard financial covenants and reporting requirements. At September 30, 2017, the Company was in compliance with its financial covenants.

BB&T Bank

At September 30, 2017, we had three letters of credit with BB&T totaling \$0.9 million, which expired and are pending on release by the bank and customer. At September 30, 2017 and December 31, 2016, the cash collateral account with BB&T totaled \$1.0 million and \$1.1 million, respectively and were classified as restricted cash on the consolidated balance sheets.

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## 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. 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. Reconciliation of non-GAAP EBITDA and Adjusted EBITDA to the most directly comparable GAAP measures are as follows:

	Three months ended		Nine months ended	
	September 30,		September 30,	
	2017	2016	2017	2016
Net (loss) income	(\$605)	\$168	(\$44)	\$418
Interest income, net	(15)	(11)	(60)	(52)
Provision for income taxes	92	80	399	275
Depreciation and amortization	247	276	754	809
EBITDA	(281)	513	1,049	1,450
Loss (gain) from the change in fair value of contingent consideration	139	(525)	436	(370)
Restructuring charges	-	85	45	487
Stock-based compensation expense	627	412	1,873	900
Consulting support for finance restructuring	-	232	-	310
Acquisition-related expense	454	-	473	-
Westinghouse bankruptcy related expense	-	-	122	-
Adjusted EBITDA	\$939	\$717	\$3,998	\$2,777

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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:

(in thousands)	Three months ended		Nine months ended	
	September 30, 2017	2016	September 30, 2017	2016
Net (loss) income	(\$605)	\$168	(\$44)	\$418
Loss (gain) from the change in fair value of contingent consideration	139	(525)	436	(370)
Restructuring charges	-	85	45	487
Stock-based compensation expense	627	412	1,873	900
Consulting support for finance restructuring	-	232	-	310
Acquisition-related expense	454	-	473	-
Westinghouse bankruptcy related - expense	-	-	122	-
Adjusted net income	\$615	\$372	\$2,905	\$1,745
(Loss) earnings per share - diluted	(\$0.03)	\$0.01	\$0.00	\$0.02
Adjusted earnings per share - diluted (a)	\$0.03	\$0.02	\$0.15	\$0.10
Weighted average shares outstanding - Diluted (a)	19,702,742	18,470,117	19,601,661	18,287,870

(a) During the three months and nine months ended September 30, 2017, the Company reported a GAAP net loss and positive adjusted net income. Accordingly, there were 421,972 and 396,883 dilutive shares from options and RSUs included in the adjusted earnings per common share calculation for the three and nine months ended September 30, 2017, respectively, 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

#### Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Quarterly Report on Form 10-Q. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this quarterly report, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were not effective at the reasonable assurance level because of a material weakness related to certain revenue recognition matters, as described below and in Item 9A of our Annual Report on Form 10-K for the year ended December 31, 2016.

#### Remediation Plan

We are committed to the remediation of the identified material weakness, as well as the continued improvement of our overall system of internal control over financial reporting. We are currently working to remediate the underlying causes of the control deficiencies that led to the identified material weakness. Our remediation plan includes the following:

Documenting policies and procedures to appropriately compile contract information and ensure that such information was properly recorded and reviewed;

Documenting review and approval of revenue arrangements to ensure that they were accounted in accordance with applicable U.S. GAAP, including certain software arrangements which lacked VSOE; and

Documenting evidence surrounding estimates-to-complete on the Company's fixed price contracts to ensure such estimates were appropriately reviewed and approved to support percentage of completion adjustments.

These additional review procedures and documentation have been in place and operating since the second quarter 2017, and while we believe these controls effectively remediate the identified material weakness, the identified material weakness will not be considered remediated until management has concluded the required level of testing. As we perform our testing, we may take additional measures or modify our remediation plan.

#### Changes in Internal Control over Financial Reporting

Except for the implementation of remediation measures 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.

#### 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

2.1 Stock Purchase Agreement, among GSE Systems, Inc., through its wholly owned subsidiary GSE Performance Solutions, Inc., Richard and Cynthia Linton (and certain trusts owned thereby), and Absolute Consulting, Inc., dated as of September 20, 2017. Incorporated herein by reference to Exhibit 2.1 of GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on September 20, 2017.

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

SIGNATURES

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

Date: November 14, 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)