

GSE SYSTEMS INC

Form 10-K

March 25, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)  
OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2015

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

(State of incorporation)

52-1868008

(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

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of each class	Name of each exchange on which registered
Common Stock, \$.01 par value	NYSE MKT

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes o No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes o  
No

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

Indicate by check mark whether the registrant 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 (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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. (Check one):

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

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

The aggregate market value of Common Stock held by non-affiliates of the Registrant was \$27,315,219 on June 30, 2015, the last business day of the Registrant's most recently completed second fiscal quarter, based on the closing price of such stock on that date of \$1.55.

The number of shares outstanding of the registrant's Common Stock as of March 24, 2016 was 17,911,859 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2016 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, are incorporated by reference into Part III.

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## 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, 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 below under Item 1A Risk Factors and the following, could cause our business conditions and results to differ materially from what is contained in forward-looking statements:

- changes in the rate of economic growth in the United States and other major international economies;
- changes in investment by the nuclear and fossil electric utility industry, the chemical and petrochemical industries, or the U.S. military;
- changes in the financial condition of our customers;
- changes in the regulatory environment;
- changes in project design or schedules;
- contract cancellations;
- changes in our estimates of costs to complete projects;
- changes in trade, monetary and fiscal policies worldwide;
- currency fluctuations;
- war and/or terrorist attacks on facilities either owned by our customers or our company, or where equipment or services are or may be provided;
- initiation, prosecution, or outcomes of future litigation;
- protection and validity of our trademarks and other intellectual property rights;
- increasing competition by foreign and domestic companies;
- compliance with our debt covenants;
- recoverability of claims against our customers and others; and
- changes in estimates used in our critical accounting policies.

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 above and in Item 1A Risk Factors 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.

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Company Information Available on the Internet

Our Internet address is [www.gses.com](http://www.gses.com). We make available free of charge through our Internet site our annual reports on Form 10-K; quarterly reports on Form 10-Q; current reports on Form 8-K; proxy statements, and any amendment to those reports filed or furnished pursuant to the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

PART I

ITEM 1. BUSINESS.

GSE Systems, Inc. ("GSE Systems", "GSE", the "Company", "we", "us" or "our"), a NYSE MKT company trading under symbol GVP, is a team of dedicated people that help customers meet their performance improvement goals and reduce their risk. We do this by combining expertise in simulation, engineering, and training to improve both plant and human performance.

We execute projects globally with over 260 employees operating from offices in the U.S., China, India, Sweden and the United Kingdom. While the majority of revenue comes from the nuclear and fossil power generation markets, we also serve the oil and gas, refining, chemicals, petrochemicals, industrial gas, manufacturing, and plant utilities markets.

GSE Systems was formed on March 30, 1994, to consolidate the simulation and related businesses of S3 Technologies, General Physics International Engineering & Simulation and EuroSim, each separately owned and operated by ManTech International Corporation, GP Strategies Corporation and Vattenfall AB, respectively.

On April 26, 2010, we completed the acquisition of TAS Holdings Ltd ("TAS") and subsequently merged TAS into our UK subsidiary, GSE Systems Ltd. Our UK operations, located in Stockton-On-Tees, England provides engineering consulting, specifically in electrical system design, instrumentation and controls engineering and automation engineering. The majority of our UK customers are in the petroleum refining, oil and gas, chemical and petrochemical industries.

On January 4, 2011, we acquired EnVision Systems, Inc. ("EnVision"). The EnVision product line consists of interactive computer-based tutorials and related simulation models primarily for the petrochemical and oil & gas refining industries. The EnVision products provide a foundation in process fundamentals and plant operations and interaction. We have more than 750 installations of EnVision product in over 28 countries, and our approximately 130 clients include Shell Oil Company, BP Products North America, Total and Chevron.

On November 14, 2014, we acquired Hyperspring, LLC, an Alabama limited liability company. Hyperspring is a staff augmentation company that hires personnel to fulfill staff positions on a short-term basis for energy industry customers, primarily nuclear power customers. Hyperspring personnel provide training, operations and maintenance support including: generic fundamentals exams ("GFES"), accreditation training visit ("ATV") preparation, senior reactor operator ("SRO") certification, procedure development, work management, tagging/labeling, outage execution, planning/scheduling, corrective action, self-assessments and equipment reliability. Customers include TVA, Entergy, PSEG Nuclear LLC and NRG Energy Inc.

In conjunction with the Hyperspring acquisition, the Company acquired a 50% ownership stake in IntelliQlik, LLC, a Delaware limited liability company. IntelliQlik is developing a software platform for online learning and learning management for the energy market. A former member of Hyperspring also has a 50% ownership stake in IntelliQlik. On December 31, 2014 the Company merged EnVision with GSE Power Systems, Inc. and changed the name of GSE Power Systems, Inc. to GSE Performance Solutions, Inc. The change reflects our growing focus on providing solutions to improve human and plant performance lifecycles.

For years we have described ourselves as a simulation company, providing mainly simulation solutions to improve designs, de-risk projects and train operators. Our acquisition of Hyperspring, and investment in IntelliQlik, LLC, in November 2014 are helping to accelerate our transformation into a performance improvement company. We improve plant performance with a combination of simulation, engineering and plant services that help clients improve their plant's profitability, productivity and safety, and assist in decommissioning the plants at the end of their life cycle. We improve human performance by providing technologies and services that systematically help clients in recruiting and selecting the right person for the job and training that individual throughout their career from entry-level to expert.

As of December 31, 2015, GSE Systems was the parent company of:

• GSE Performance Solutions, Inc. (formerly GSE Power Systems, Inc.), a Delaware corporation;

• GSE Power Systems, AB, a Swedish corporation;

• GSE Engineering Systems (Beijing) Co. Ltd., a Chinese limited liability company;

• GSE Systems, Ltd., a Scottish limited liability company;

• EnVision Systems (India) Pvt. Ltd., an Indian limited liability company; and

• Hyperspring, LLC, an Alabama limited liability company.

The Company has a 50% interest in IntelliQlik, LLC, a Delaware limited liability company and a 50% interest in General Simulation Engineering RUS LLC, a Russian closed joint-stock company. The Company accounts for these entities under the equity method of accounting.

## Operating Segments

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. Our two business segments are:

### ·Performance Improvement Solutions (approximately 65% of revenue)

Our Performance Improvement Solutions segment primarily encompasses our next generation power plant and process high-fidelity simulation solutions, as well as engineering solutions. 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, and 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, (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.

### ·Nuclear Industry Training and Consulting (approximately 35% of revenue)

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

Financial information is provided in Note 16 of the accompanying consolidated financial statements regarding our business segments and geographic operations and revenue.



## Business Strategy, Industry Trends, Products, Services

### Business Strategy

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

Expand our total addressable market. Our focus on growth means introducing product capabilities or new product categories that create value for our customers and therefore expand our total addressable market. Currently we are working on initiatives to expand our solution offerings in both our business units which may include, but not be limited to the following: expanding our software product portfolio to the industries we serve such as 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.

Pursue strategic acquisitions opportunistically. We intend to complement our organic growth strategy through selective acquisitions of other software and service businesses, both domestic and international, which would enhance our existing portfolio of products, 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 small acquisitions in recent years and believe the opportunity exists to do more. For example, in January 2011 we acquired 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. We acquired Hyperspring in 2014, 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 very synergistic, including in 2015, for the first time, expanding these services internationally.

Continue to provide technology-enabled, market-leading solutions. We invest in R&D in order to deliver unique solutions that add tremendous value to our end-user markets. Recently 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 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. Gross spending on software product development ("development") expenses totaled \$3.1 million and \$3.8 million for the years ended December 31, 2015 and 2014, respectively. We intend to continue to make prudent investments in research and development ("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 and that we delight them in the process. 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. 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.

Expand International Operations in Selected Markets. We believe there are additional opportunities for us to market our software and services to international customers, and 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. Such VARs may yield positive results for our pursuing international nuclear opportunities globally (see industry trends below). We may explore the creation of appropriate JVs to target nuclear new-build programs in key growth regions.

## Industry Trends

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

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

According to Power Engineering magazine, in the United States every sector in the energy industry is expected to lose a large percentage of its workforce 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.

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

An important emerging trend to note seems to be a growing recognition that nuclear energy is an increasingly desirable form of energy production fulfilling a key component of zero carbon initiatives across the globe. Support for generating power from zero carbon emissions sources is evidenced by initiatives such as the 2015 United Nations Climate Change Conference. Nuclear power generation is a critical means of zero carbon power generation that is growing in importance as a result. We believe that GSE is well positioned to take advantage of these trends as they emerge and develop.

### Growing Global Power Demand and the Increasing Emphasis on Nuclear Power

World Energy Outlook 2015 projects that electricity demand increases by more than 70% over the 2013 to 2040 time period. 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 an eye 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 65 nuclear plants under construction in 15 countries, including 24 in China, nine in Russia, six in India and four in the United Arab Emirates according to the Nuclear Energy Institute. Five reactors are currently under construction in the U.S. including two for Southern Nuclear at the Vogtle site; two at SCANA's VC Summer site and one at the Tennessee Valley Authority's Watts Bar generating facility (which is planned for commercial production imminently). According to the World Nuclear Association, there are 165 reactors in 27 countries in specific phases of planning that will be operating by 2030. This pace of construction is surpassing peak construction velocity of the 1970's and 1980's.

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

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

## Products and Services

### Entry2Expert™ Performance Cycle

To assist our clients in creating world-class internal training and performance improvement programs, we are offering the Entry2Expert™ Performance Solution, a set of integrated and scalable products and services which provide a structured program from employee selection and onboarding through continuous skills improvement for experienced employees. GSE can now provide the right training solution for the right step in each employee's career.

The major elements of the Entry2Expert™ Performance Solution include defining specific training needs by analyzing job functions; following proven processes to structure the entire training program for clients; providing world-class training content and series of simulation solutions for both the new employee and most experienced workers; and providing the expert training staff and consultants to ensure this is all implemented effectively.

**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, versus 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. We have delivered nearly 450 plant-specific simulators to clients in the nuclear power, fossil power and process industries worldwide.

The goal of our Entry2Expert™ performance lifecycle offering is to ensure superior human achievement in the dimensions of:

- Shortening the learning process
- Reducing human errors
- Mitigating the effects of retirement and turnover
- Improving workforce agility
- Achieving and maintaining certifications and compliance
- All of these dimensions help to improve our customers' bottom lines

The dramatic increase in energy demand world-wide over the next 30 years will require significant amounts of training for new employees and also will require new plants using energy of all sources. These new plants will need to be engineered and designed prior to construction, and GSE high-fidelity modeling tools are being used increasingly to verify and validate control system and overall plant designs.

Specialized Plant Support: As our customers' experienced staffs retire, access to experts that can help with specialized plant projects is critical. Through our Hyperspring subsidiary, we also can provide expert support either through staff augmentation or turnkey projects for the following:

- o Procedure Development
- o Training Material Upgrade and Development
- o Work Management
- o Outage Execution
- o Planning and Scheduling
- o Corrective Actions
- o Self-Assessments
- o Equipment Reliability

Entry2Expert™ ("E2E") brings together the collection of skills GSE has amassed over more than 40 years beginning with its traditional roots in custom high fidelity simulation and training solutions for the power industries, extended through the acquisition of specialized engineering capabilities, enhanced by the entry and intermediate level training solutions of EnVision, and the extensive nuclear industry training and consulting services of Hyperspring.

## Customers and Locations

For more than 40 years, we have been developing next-generation, custom training simulation technologies. Since we built the first commercial full-scope nuclear power plant simulator in 1971, we have completed more than 1,100 installations in 50 countries and have built more full-scope power plant simulators than all of our competitors combined.

In 2015, approximately 31% of our revenue was generated from end-users outside the United States. A small representative list of our customers include: ABB Inc., American Electric Power, Bechtel Hanford National Laboratory, Duke Energy, EDF Energy (United Kingdom), Emerson Process Management, Exelon, Kärnkraftsäkerhet och Utbildning AB (Sweden), Korean Electric Power Company (Korea), PSEG Nuclear, Inc., Shangdong Nuclear Power Co. Ltd. (China), Siemens AG (Germany), State Nuclear Power Automation System Engineering Company (China), Savannah River Nuclear Solutions, LLC, Tennessee Valley Authority, US Department of Energy, and Westinghouse Electric Co.

Hydrocarbon and chemical process customers include numerous large oil refineries and chemical plants such as BP (worldwide), Statoil ASA (Norway), Chevron, Emerson Process Management, Shell Oil Company (worldwide), Savannah River Nuclear Solutions, LLC, and Total (Belgium).

The following customer has provided more than 10% of the Company's consolidated revenue in 2015:

Years ended
December
31,
2015    2014

Tennessee Valley Authority ("TVA") 15.9% \*

\*Customer revenue balance was under 10% in 2014.

## Marketing and Sales

We market our products and services through a network of direct sales staff, agents and representatives, and strategic alliance partners. Market-oriented business and customer account teams define and implement specific campaigns to pursue opportunities.

In 2015 we launched a new website with improved navigation, a modern look and feel, and responsiveness to whatever type of device the viewer is using. We continue to have a proactive public relations program, issuing more non-financial press releases aimed at product development and delivery, as well as our role in numerous industry trade shows and technical conferences. We are active across numerous social media platforms to build a stronger presence across all media our clients use to find information about the Company, and providing useful information for each stage of the client's journey with the Company.

The Company's ability to support its multi-facility, international and/or multinational clients is facilitated by its network of offices and strategic partners in the U.S. and overseas. In addition to the offices located overseas, the Company's ability to conduct international business is enhanced by its multilingual and multicultural workforce. GSE has strategic relationships with system integrators and agents representing its interests in Bulgaria, Japan, Malaysia, Mexico, Singapore, South America, South Korea, Taiwan, Ukraine and various locations in the Gulf Coast Countries of the Middle East.

## Competition

The Performance Improvement Solutions business encounters intense competition. In the nuclear simulation market, GSE competes directly with firms primarily from Canada, France and the U.S., such as L-3 MAPPS Inc., a subsidiary of L-3 Communications (Canada), CORYS T.E.S.S (France) and Western Services Corporation. In the fossil simulation market, the Company competes with smaller companies in the U.S. and overseas. In the process industries the main competition comes from large Digital Control System/Automation companies such as Honeywell and Schneider. Competition for generalized engineering services, particularly those served from our office in the U.K., tend to be very locally oriented.

The Nuclear Industry Training and Consulting business services include training related products and services as well as staff augmentation solutions. The competition for training related services includes: GP Strategies, The Westwind Group, Professional Training Technologies, and Western Technical Services. The competition for staff augmentation includes: Absolute Consulting, CB&I, Planet Forward, and The Westwind Group.

## Competitive Advantages

While there is competition in various industry niches, there are few companies in our space that can combine the engineering, simulation and training expertise we now have through the execution of our acquisition strategy. None of our traditional competitors serve the broader performance improvement market and few work across the broader energy markets of Nuclear and Fossil power plus Petrochemicals.

**Unique Combination of Talent.** Nobody in our market space brings together the sophistication of simulation technology with the engineering expertise, training expertise and visualization expertise to provide the holistic people and plant performance improvement solutions as well as we do.

**Reputation for Customer Satisfaction.** As part of its ISO-9000 Quality Program Certification, GSE measures customer satisfaction across numerous factors such as On-Time Delivery, Problem Solving, and Customer Communication. In each category measured we routinely exceed customer expectations.

**Industry Expertise.** GSE is a leading innovator and developer of real-time software with more than 40 years of experience producing high-fidelity, real-time simulators. As a result, the Company has acquired substantial applications expertise in the energy and industrial process industries. The Company employs a highly educated and experienced multinational workforce of over 260 employees, including approximately 140 engineers and scientists in fields such as chemical, mechanical and electrical engineering, applied mathematics and computer sciences, and approximately 70 instructors and plant operations staff specialists.

**Proprietary Software Tools.** GSE has developed a library of proprietary software tools including auto-code generators and system models that substantially facilitate and expedite the design, production and integration, testing and modification of software and systems. These tools are used to automatically generate the computer code and systems models required for specific functions commonly used in simulation applications, thereby enabling it or its customers to develop high-fidelity, real-time software quickly, accurately and at lower costs. The Company also has an expertise in being able to integrate 3<sup>rd</sup> party engineering codes into the Company's simulation environment, thereby being able to offer some of the most sophisticated technical solutions in the market. The Company has a substantial library of Process-Specific Simulation models and eLearning Modules aimed at the oil and gas, refining and specialty chemicals market.

**Training Curricula.** The Company has developed hundreds of detailed courses and simulator exercise material and specific industrial applications including oil and gas refining, gas-oil production, nuclear and combined cycle gas turbine power plant and desalination.

**Our Nuclear Industry Training and Consulting business** is mostly focused on training and operations support. Our trainers and consultants provide their services at the customer facilities which allows us to interface with our customers directly in the course of doing business versus having to periodically call on customers. Our proximity allows us a significant competitive advantage in that we can immediately offer solutions and therefore bypass lengthy bid processes.



## Intellectual Property.

The Company depends upon its intellectual property rights in its proprietary technology and information. GSE maintains a portfolio of trademarks (both registered and unregistered), copyrights (both registered and unregistered), and licenses. While such trademarks, copyrights and licenses as a group are of material importance to the Company, it does not consider any one trademark, copyright, or license to be of such importance that the loss or expiration thereof would materially affect the Company. The Company relies upon a combination of trade secrets, copyright, and trademark law, contractual arrangements and technical means to protect its intellectual property rights. GSE distributes its software products under software license agreements that grant customers nonexclusive licenses for the use of its products, which are nontransferable. Use of the licensed software is restricted to designated computers at specified sites, unless the customer obtains a site license of its use of the software. Software and hardware security measures are also employed to prevent unauthorized use of the Company's software, and the licensed software is subject to terms and conditions prohibiting unauthorized reproduction of the software.

The Company does not own any patents. The Company believes that all of the Company's trademarks (especially those that use the phrase "GSE Systems") are valid and will have an unlimited duration as long as they are adequately protected and sufficiently used. The Company's licenses are perpetual in nature and will have an unlimited duration as long as they are adequately protected and the parties adhere to the material terms and conditions.

GSE has numerous registered U.S. trademarks: GSE Systems®, JTOPMERET®, RELAP5-HD®, TOTALVISION®, VPanel® and SimExec®. Some of these trademarks have also been registered in foreign countries. The Company also claims trademark rights to DesignEP™, Java Application and Development Environment (JADE)™, OpenSim™, PSA-HD™, RACS™, SimSuite Pro™, SmartTutor™, THOR™, and Xtreme I/S™.

In addition, the Company maintains federal statutory copyright protection with respect to its software programs and products, has registered copyrights for some of the documentation and manuals related to these programs, and maintains trade secret protection on its software products.

Despite these protections, the Company cannot be sure that it has protected or will be able to protect its intellectual property adequately, that the unauthorized disclosure or use of its intellectual property will be prevented, that others have not or will not develop similar technology independently, or, to the extent it owns any patents in the future, that others have not or will not be able to design around those patents. Furthermore, the laws of certain countries in which the Company's products are sold do not protect its products and intellectual property rights to the same extent as the laws of the United States.

## Industries Served.

The following chart illustrates the approximate percentage of the Company's 2015 and 2014 consolidated revenue by industries served:

	Years ended December 31,	
	2015	2014 <sup>(1)</sup>
Nuclear power industry	71%	61%
Fossil fuel power industry	17%	22%
Process industry	7%	10%
Other	5%	7%
Total	100%	100%

(1) Prior year amounts have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods, as described in Note 2 - Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements.

The increase in nuclear power in industry revenue in 2015 as compared to 2014 reflects the acquisition of Hyperspring in November 2014. Approximately 97% of Hyperspring's 2015 revenue was generated from nuclear power customers.

## Contract Backlog.

The Company does not reflect an order in backlog until it has received a contract or purchase order that specifies the terms and milestone delivery dates or other payment terms. As of December 31, 2015, the Company's aggregate contract backlog totaled approximately \$47.9 million of which approximately \$30.2 million or 63.0% is expected to be converted to revenue by December 31, 2016. As of December 31, 2014, the Company's aggregate contract backlog totaled approximately \$49.7 million.

## Employees.

As of December 31, 2015, the Company had 268 employees as compared to 335 employees at December 31, 2014.

ITEM 1A.

RISK FACTORS.

The following are some of the factors that we believe could cause our actual results to differ materially from historical results and from the results contemplated by the forward-looking statements contained in this report and other public statements made by us. Additional risks and uncertainties not presently known to us, or that we currently see as immaterial, may also harm our business. Most of these risks are generally beyond our control. If any of the risks or uncertainties described below, or any such other or additional risks and uncertainties actually occurs, our business, results of operations and financial condition could be materially and adversely affected. The following information should be read in conjunction with Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and related notes under Item 8 - Financial Statements and Supplementary Data.

Our business is largely dependent on sales to the nuclear power industry. Any disruption in this industry would have a material adverse effect upon our revenue and profitability.

In 2015, 71% of our revenue was from customers in the nuclear power industry (61% in 2014). We expect to derive a significant portion of our revenue from customers in the nuclear power industry for the foreseeable future. Our ability to supply nuclear power plant simulators and related products and services is dependent on the continued operation of nuclear power plants and, to a lesser extent, on the construction of new nuclear power plants. A wide range of factors affect the continued operation and construction of nuclear power plants, including the political and regulatory environment, the availability and cost of alternative means of power generation, the occurrence of future nuclear incidents, such as the one which occurred at the Fukushima Daiichi nuclear plant in 2011, and general economic conditions. In addition, demand for our products and services may be affected by changes in the legal and regulatory environment within which the global nuclear power industry operates. Regulatory changes could materially affect demand for our products, the profitability of our service deliveries to nuclear power industry customers, and the overall efficacy of our current business model.

Our sales to foreign customers expose us to risks associated with operating internationally.

Sales of products and services to end users outside the United States accounted for approximately 31% of the Company's consolidated revenue in 2015 and 52% of consolidated revenue in 2014. Consequently, our businesses are subject to a variety of risks that are specific to international operations, including the following:

- export laws and regulations that could erode our profit margins or restrict exports;
- compliance with the U.S. Foreign Corrupt Practices Act and similar non-U.S. regulations such as the UK Bribery Act;
- the burden and cost of compliance with foreign laws, treaties and technical standards generally, as well as responding to changes in those regulations;
- contract award and funding delays;
- potential restrictions on transfers of funds;
- potential difficulties in accounts receivable collection;
- currency fluctuations, including costs and potentially limited availability of viable hedging options;
- import and export duties and value added or other taxes;
- transportation and communication delays and interruptions;
- difficulties involving strategic alliances and managing foreign sales agents or representatives;
- uncertainties arising from foreign local business practices and cultural considerations; and
- potential military conflicts and political risks.

While we have and will continue to adopt measures to reduce the potential impact of losses resulting from the risks of our foreign business, we cannot ensure that such measures will be adequate. The following foreign countries have provided more than 10% of our consolidated revenue for the indicated period:

	Years ended	
	December 31,	
	2015	2014 <sup>(1)</sup>
United Kingdom	9%	12%
People's Republic of China	9%	11%

(1) Prior year amounts have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods, as described in Note 2 - Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements.

Nuclear Industry Training and Consulting revenue, results of operations, and cash flows may suffer upon the loss of a significant customer.

In conjunction with our acquisition of Hyperspring on November 14, 2014, the Company established its Nuclear Industry Training and Consulting operating segment. For the years ended December 31, 2015 and 2014, the following customers have provided more than 10% of this operating segment's revenues:

	Years ended December 31, 2015 2014	
Tennessee Valley Authority ("TVA")	46%	62%
PSEG Nuclear LLC	25%	17%
Entergy Corporation	10%	11%

Hyperspring may lose a significant customer if any existing contract with such customer expires without being extended, renewed, renegotiated or is terminated by the customer prior to expiration, to the extent such early termination is permitted by the contract. A number of Hyperspring's contracts are typically subject to expiration during each year, and they may lose any of these contracts if they are unable to extend, renew or renegotiate the contracts. The loss of any significant customer would adversely affect Hyperspring's revenue, results of operations, and cash flows.

Our expense levels are based upon our expectations as to future revenue, and we may be unable to adjust spending to compensate for a revenue shortfall. Accordingly, any revenue shortfall would likely have a disproportionate effect on our operating results.

Our revenue was \$56.8 million and \$37.5 million for the years ended December 31, 2015 and 2014, respectively. Our operating loss was \$4.1 million and \$7.5 million, for the years ended December 31, 2015 and 2014, respectively. Our operating results have fluctuated in the past and may fluctuate significantly in the future as a result of a variety of factors, including purchasing patterns, timing of new products and enhancements by us and our competitors, and fluctuating global economic conditions. Since our expense levels are based in part on our expectations as to future revenue and includes certain fixed, pre-negotiated, and prepaid costs, we may be unable to adjust spending in a timely manner to compensate for any revenue shortfall and such revenue shortfalls would likely have a disproportionate adverse effect on our operating results.

Our backlog is subject to reduction and cancellation.

Backlog represents products or services that our customers have committed by contract or purchase order to purchase from us which have not yet been delivered or recognized as revenue. Our backlog as of December 31, 2015 and 2014 was \$47.9 million and \$49.7 million, respectively. Our backlog is subject to fluctuations, and our historical and current backlog are not necessarily indicative of future backlog or sales. Moreover, cancellations of purchase orders or reductions of the services requested in existing contracts could substantially and materially reduce our backlog and, consequently, our future revenues. Our failure to replace canceled or reduced backlog would have an adverse effect on our operating results.

We are currently a party to multiple fixed price contracts and will continue to enter into similar contracts in the future. If we are not able to accurately estimate or control costs on such projects, the profitability of such projects could be reduced.

A significant portion of our revenue is attributable to contracts entered into on a fixed price basis, which allows us to benefit from cost savings, but we carry the burden of cost overruns. If our initial estimates are incorrect regarding our costs of performance under these contracts, or if unanticipated circumstances arise, we could experience cost overruns which would result in reduced profits or even result in net losses on these contracts. Our financial condition is dependent upon our ability to maximize our earnings from our contracts. Lower earnings or losses caused by cost overruns could have a negative impact on our financial results.

Under time and materials contracts, we are paid for labor at negotiated hourly billing rates and for certain expenses. Under cost-reimbursable contracts, which are subject to a contract ceiling amount, we are reimbursed for allowable costs and are paid a fee, which may be fixed or performance based. However, if our 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 even under a time and materials contract.

Our inability to successfully estimate and manage costs on each of these contract types may materially and adversely affect our financial condition.

Our Simulation business is dependent on product innovation and research and development, which costs are incurred prior to realization of revenue for new products and improvements.

We believe that our success will depend in large part on our ability to maintain and enhance our current product line, develop new products, maintain technological competitiveness and meet an expanding range of customer needs. Our product development activities are aimed at the development and expansion of our library of software modeling tools, the improvement of our display systems and workstation technologies, and the advancement and upgrading of our simulation technology. The life cycles for software modeling tools, graphical user interfaces, and simulation technology are variable and largely determined by competitive pressures and the evolution of software and standards that may be controlled by third parties. Consequently, we will need to continue to make significant investments in research and development to enhance and expand our capabilities in these areas and to maintain our competitive advantage. We cannot control, and we may be unable to predict accurately, the development and evolution of these competitive pressures and external software and standards.

We use derivative instruments in the normal course of our business which could result in financial losses and exposure to other risks that negatively impact our net income (loss) and business operational efficiency.

We periodically enter into forward foreign exchange contracts to manage market risks associated with the fluctuations in foreign currency exchange rates on foreign-denominated trade receivables. We could recognize financial losses as a result of volatility in the market values of these contracts or if a derivative instrument counterparty fails to perform. We attempt to minimize credit exposure by limiting counterparties to internationally recognized financial institutions, but even these counterparties are subject to default and contract risk and this risk is beyond our control. Additionally, we may need or wish to avail ourselves of other forms of hedging or derivative instruments in the future depending on our business needs, and these other types of derivative instruments may be subject to the same and other risk, and may not be available to us on a cost-effective or risk-controlled basis, if at all. The unavailability of viable and cost effective risk management, hedging, or similar instruments now or in the future could adversely impact our business operational efficiency or results.

We issue performance, advance payment, and bid bonds in the normal course of our business which could result in financial losses that negatively impact our net income (loss).

We are often required to issue performance, advance payment, and bid bonds to our customers and potential customers as a normal part of our business activities. Our customers may have the ability to draw upon these performance bonds in the event we fail to cure a material breach of the contract within 30 days of receiving notice from the customer regarding the nature of the breach. As of December 31, 2015, we had issued advance payment and performance bonds on twelve contracts totaling \$3.6 million, all of which have been cash collateralized except one bond totaling \$43,000; the largest of these performance bonds was for \$1.5 million. Although we expect no material breaches to occur on these contracts, if such a breach were to occur and we failed to cure such breach, we could incur a loss of up to \$3.6 million.

We rely upon our intellectual property rights for the success of our business; however, the steps we have taken to protect our intellectual property may be inadequate.

Although we believe that factors such as the technological and creative skills of our personnel, new product developments, frequent product enhancements and reliable product maintenance are important to establishing and maintaining a technological leadership position, our business depends, in part, on the strength of our intellectual property rights in our proprietary technology and information. We rely upon a combination of trade secret, copyright, and trademark law, contractual arrangements and technical means to protect our intellectual property rights. We enter into confidentiality agreements with our employees, consultants, joint venture and alliance partners, customers and other third parties that are granted access to our proprietary information, and limit access to and distribution of our proprietary information. There can be no assurance, however, that we have protected or will be able to protect our proprietary technology and information adequately, that the unauthorized disclosure or use of our proprietary information will be prevented, that others have not or will not develop similar technology or information independently, or, to the extent we own any patents in the future, that others have not or will not be able to design around those future patents. Furthermore, the laws of certain countries in which our products are sold do not protect our products and intellectual property rights to the same extent as the laws of the United States. Our inability to protect our intellectual property rights from infringement, dilution, or loss could make it more difficult for us to generate revenue from the offer, licensure, and sale of our products and services and could enable third parties to compete with us more effectively.

The industries in which we operate are highly competitive. This competition may prevent us from raising prices at the same pace at which our costs increase.

Our businesses operate in highly competitive environments with both domestic and foreign competitors, many of whom have substantially greater financial, marketing and other resources than we do. The principal factors affecting competition in our industries include price, technological proficiency, ease of system configuration, product reliability, applications expertise, engineering support, local presence and financial stability. We believe competition in the simulation fields may further intensify in the future as a result of advances in technology, consolidations and strategic alliances among competitors, increased costs required to develop new technology and the increasing importance of software content in systems and products. As our business has a significant international component, changes in the value of the dollar could adversely affect our ability to compete internationally and could reduce our profitability on international business opportunities that we do win.

We may encounter difficulties in effectively integrating acquired businesses.

As part of our business strategy, we have acquired companies with compatible or related products. These and any future acquisitions we make will be accompanied by the risks commonly encountered in acquisitions of companies, which include, among other things:

- “potential exposure to unknown liabilities of the acquired companies;
- “higher than anticipated acquisition costs and expenses;
- ..difficulty and expense of assimilating the operations and personnel of the companies, especially if the acquired operations are geographically distant or culturally different;
- “potential disruption of our ongoing business and diversion of management time and attention;
- “failure to maximize our financial and strategic position by the successful incorporation of acquired technology;
- “difficulties in adopting and maintaining uniform standards, controls, procedures and policies;
- “loss of key employees and customers as a result of changes in management; and
- “possible dilution to our shareholders.

We may not be successful in overcoming these risks or any other problems encountered in connection with any of our acquisitions, and if we are not successful, our financial results may be materially impacted.



A failure to attract and retain technical personnel could reduce our revenue and our operational effectiveness.

There is a continuing demand for qualified technical personnel in the industries within which we operate. We believe that our future growth and success will depend upon our ability to attract, train and retain such personnel. Our design and development efforts depend on hiring and retaining qualified technical personnel. An inability to attract or maintain a sufficient number of technical personnel could have a material adverse effect on our contract performance or on our ability to capitalize on market opportunities.

The nuclear power industry, our largest customer group, is associated with a number of hazards which could create significant liabilities.

Our business could expose us to third party claims with respect to product, environmental and other similar liabilities. Although we have sought protection from these potential liabilities through a variety of legal and contractual provisions as well as through liability insurance, the effectiveness of such protections has not been fully tested. Certain of our products and services are used by the nuclear power industry primarily in operator training. Although our contracts for such products and services typically contain provisions designed to protect us from potential liabilities associated with such use, there can be no assurance that we would not be materially adversely affected by claims or actions which may potentially arise due to factors that may be outside of our direct control.

Cyber security incidents could disrupt business operations, result in the loss of critical and confidential information, and adversely impact our reputation and results of operations.

Global cyber security threats can range from uncoordinated individual attempts to gain unauthorized access to our information technology ("IT") systems to sophisticated and targeted measures known as advanced persistent threats. While we employ comprehensive measures to prevent, detect, address and mitigate these threats (including access controls, data encryption, vulnerability assessments, continuous monitoring of our IT networks and systems and maintenance of backup and protective systems), cyber security incidents, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption or unavailability of critical data and confidential or proprietary information (our own or that of third parties) and the disruption of business operations. The potential consequences of a material cyber security incident include reputational damage, litigation with third parties, diminution in the value of our investment in research, development and engineering, loss of intellectual property, and increased cyber security protection and remediation costs, which in turn could adversely affect our competitiveness and results of operations.

Third-party claims that we allegedly infringe the intellectual property rights of others may be costly to defend or settle and could damage our business.

We cannot be certain that our software and services do not infringe issued patents, copyrights, trademarks or other intellectual property rights of third parties. We may be subject to legal proceedings and claims from time to time, including claims of alleged infringement of intellectual property rights of third parties by us or our licensees concerning their use of our software products and integration technologies and services. Third parties may bring claims of infringement against us. Because our software is integrated with our customers' networks and business processes, as well as other software applications, third parties may bring claims of infringement against us, as well as our customers and other software suppliers, if the cause of the alleged infringement cannot easily be determined. Claims of alleged infringement may have a material adverse effect on our business and may discourage potential customers from doing business with us on acceptable terms, if at all, even if they are ultimately adjudicated to have no merit, dismissed, or settled. Defending against claims of infringement may be time-consuming and may result in substantial costs and diversion of resources, including our management's attention to our business. Furthermore, a party making an infringement claim could secure a judgment that requires us to pay substantial damages. A judgment could also include an injunction or other court order that could prevent us from selling our software or require that we re-engineer some or all of our products. Claims of intellectual property infringement also might require us to enter costly royalty or license agreements. We may be unable to obtain royalty or license agreements on terms acceptable to us or at all. Our business, operating results and financial condition could be harmed significantly if any of these events were to occur, and the price of our common stock could be adversely affected. In addition, we have agreed, and may agree in the future, to indemnify certain of our customers against claims that our software infringes upon the intellectual property rights of others. Although we carry general liability insurance, our current insurance coverage may not apply to, and likely would not protect us entirely or at all from, liability that may be imposed under any of the types of claims described above.

We are subject to a wide variety of laws and regulations.

Our businesses are subject to regulation by U.S. federal and state laws and foreign laws, regulations and policies. Changes to laws or regulations may require us to modify our business objectives if existing practices become more restricted, subject to escalating costs or prohibited outright. Particular risks include regulatory risks arising from federal laws, such as laws regarding export of sensitive technologies or technical information. Our business and the industries in which we operate are also at times being reviewed or investigated by regulators, which could lead to enforcement actions, fines and penalties or the assertion of private litigation claims and damages.

Our stockholder protection rights agreement and classified Board of Directors could deter acquisition proposals and make it difficult for a third party to acquire control of the Company, which could have a negative effect on the price of our common stock.

We have a stockholder protection rights agreement and a classified Board of Directors, which could discourage potential acquisition proposals and could delay or prevent a change in control. This deterrent could adversely affect the price of our common stock and make it difficult to affect a change in the composition of the Board of Directors or a change in management.

The price of our common stock is highly volatile and could decline regardless of our operating performance.

The market price of our common stock could fluctuate in response to, among other things:

- “changes in economic and general market conditions;
- ..changes in the outlook and financial condition of certain of our significant customers and industries in which we have a concentration of business;
- ..changes in financial estimates, treatment of our tax assets or liabilities or investment recommendations by securities analysts following our business;
- .. changes in accounting standards, policies, guidance or interpretations or principles;
- “sales of common stock by our directors, officers and significant stockholders;
- “our failure to achieve operating results consistent with securities analysts' projections; and
- “the operating and stock price performance of competitors.

These factors might adversely affect the trading price of our common stock and prevent you from selling your common stock at or above the price at which you purchased it. In addition, in recent periods, the stock market has experienced significant price and volume fluctuations. This volatility has had a significant impact on the market price of securities issued by many companies, including ours and others in our industry, and is likely to continue into the foreseeable future. These changes can occur without regard to the operating performance of the affected companies. As a result, the price of our common stock could fluctuate based upon factors that have little or nothing to do with our company, and these fluctuations could materially reduce our share price.

We have identified a material weakness in our internal control over financial reporting which could, if not remediated, result in additional material misstatements in our consolidated financial statements.

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as defined in Rule 13a-15(f) under the Securities Exchange Act. As disclosed in Item 9A, management identified a material weakness in our internal control over financial reporting related to revenue recognition on software license contracts with multiple deliverables. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. As a result of this material weakness, our management concluded that our internal control over financial reporting was not effective based on criteria set forth by the Committee of Sponsoring Organization of the Treadway Commission in Internal Control — An Integrated Framework. We are actively engaged in developing a remediation plan designed to address this material weakness. If our remedial measures are insufficient to address the material weakness, or if additional material weaknesses or significant deficiencies in our internal control are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results.

A sustained decline in the price of our common stock or weaker than forecasted operating results could result in write-downs of goodwill and capitalized software development costs.

In conjunction with business acquisitions, we record goodwill at fair value and review its fair value for impairment annually as of December 31, or on an interim basis if impairment indicators are present, such as a significant reduction in our market capitalization, significant declines in operating performance or disruptions to the business that could reduce our future cash flow. On November 14, 2014, we recorded \$5.6 million of goodwill related to our acquisition of Hyperspring. We tested our goodwill at the reporting unit level as of December 31, 2015, and 2014 and there was no indication of impairment. We can provide no assurance that we will not have an impairment charge in future periods as the result of changing conditions. See Note 4 to our consolidated financial statements for information regarding our goodwill.

We capitalize certain computer software development costs and, accordingly, the capitalized costs are reported on our balance sheet. 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, we assess the status of our development programs and the recoverability 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 we will write-down the investment to its estimated fair value based on the future undiscounted cash flows. The excess of any unamortized computer software costs over the related net realizable value is written down and charged to operations.

During the third quarter of 2015, the Company's CEO conducted a review of the Company's organizational and cost structures and software development plans. As a result of this review, we terminated further development of our Enterprise Data Management ("EDM") system and concluded that the capitalized software development costs relating to EDM were no longer recoverable. Accordingly, in the three months ended September 30, 2015, GSE recorded a \$1.5 million write-down of software development costs which was the full capitalized balance of the EDM configuration management system.

As of December 31, 2015 we have \$1.1 million of capitalized software development costs recorded on the consolidated balance sheets. See Note 8 to our consolidated financial statements for information regarding our capitalized software development costs.

Treatment of goodwill and capitalized software development costs in the current and future accounting periods may have an impact on the value of the company, results of operations, and price of our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

The Company is headquartered in a facility in Sykesville, Maryland (approximately 43,000 square feet). The lease for this facility expires on June 30, 2023. The Company has subleased approximately 1,000 square feet of the facility. In addition, the Company leases office space domestically in St. Marys, Georgia, and Huntsville, Alabama, and internationally in Beijing, China, Chennai, India, Nyköping, Sweden and Stockton-On-Tees, England. The Company leases these facilities for terms ending between 2016 and 2023.

ITEM 3. LEGAL PROCEEDINGS.

The Company and its subsidiaries are from time to time involved in ordinary routine litigation incidental to the conduct of its business. The Company and its subsidiaries are not a party to, and its property is not the subject of, any material pending legal proceedings that, in the opinion of management, are likely to have a material adverse effect on the Company's business, financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

## PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES.

The Company's common stock is listed on the NYSE MKT Stock Exchange, where it trades under the symbol "GVP". The following table sets forth, for the periods indicated, the high and low sale prices for the Company's common stock reported by the NYSE MKT Stock Exchange for each full quarterly period within the two most recent fiscal years:

## 2015

Quarter	High	Low
First	\$1.75	\$1.45
Second	\$1.74	\$1.39
Third	\$1.63	\$1.32
Fourth	\$2.45	\$1.36

## 2014

Quarter	High	Low
First	\$1.90	\$1.62
Second	\$1.81	\$1.65
Third	\$1.78	\$1.54
Fourth	\$1.65	\$1.20

There were approximately 823 holders of record of the common stock as of December 31, 2015. The Company has never declared or paid a cash dividend on its common stock. The Company currently intends to retain future earnings to finance the growth and development of its business and, therefore, does not anticipate paying any cash dividends in the foreseeable future on its common stock.

The Company believes factors such as quarterly fluctuations in results of operations and announcements of new products by the Company or by its competitors may cause the market price of the common stock to fluctuate, perhaps significantly. In addition, in recent years the stock market in general, and the shares of technology companies in particular, have experienced extreme price fluctuations. The Company's common stock has also experienced a relatively low trading volume, making it further susceptible to extreme price fluctuations. These factors may adversely affect the market price of the Company's common stock.

ITEM 6. SELECTED FINANCIAL DATA.

This information is not required for small reporting companies.

ITEM MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF  
7. OPERATIONS.

On November 14, 2014, (the "Closing Date") the Company, through its operating subsidiary, GSE Power Systems, Inc. (renamed GSE Performance Solutions, Inc. "GSE Performance"), acquired Hyperspring, LLC ("Hyperspring") pursuant to a Membership Interests Purchase Agreement ("Purchase Agreement") with the sellers of Hyperspring ("Sellers"). Hyperspring, headquartered in Huntsville, Alabama, specializes in training and development, plant operations support services, and staff augmentation, primarily in the United States nuclear industry. Hyperspring operates as a wholly-owned subsidiary of GSE Power. The purchase price allocation included customer relationship intangible assets valued at \$779,000 which are being amortized over seven years. GSE Performance paid the Sellers an aggregate of \$3.0 million in cash at the closing date. According to the Purchase Agreement, a \$1.2 million payment was due to the former Hyperspring members if Hyperspring were successful in renewing its contract with the Tennessee Valley Authority ("TVA") for a two year period for substantially the same scope as was currently being provided and with substantially the same economics. On September 24, 2015, TVA executed a three-year renewal contract with Hyperspring; accordingly the Company paid the \$1.2 million payment to the former Hyperspring members in October 2015. Based upon the EBITDA (earnings before interest, taxes, depreciation and amortization) attained by Hyperspring for the twelve months ended November 13, 2015, the Company was required to pay the Sellers an additional \$1.4 million which was paid in January 2016. In addition, the Company may be required, pursuant to the terms of the Purchase Agreement, to pay the Sellers up to an additional \$4.8 million if Hyperspring attains certain EBITDA targets for the two-year period ending November 13, 2017. Accordingly, the total cash paid to the Hyperspring members may total \$10.4 million.

With the acquisition of Hyperspring, the Company determined that it now has two reportable business segments: Performance Improvement Solutions which provides simulation, engineering, and training solutions and services to the nuclear and fossil fuel power industry and to the chemical and petrochemical industries and Nuclear Industry Training and Consulting which provides personnel to fulfill staff positions on a short-term basis to energy industry customers.

Critical Accounting Policies and Estimates.

As further discussed in Note 2 to the consolidated financial statements, certain prior period amounts in management's discussion and analysis have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods. 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 are discussed below. For all of these policies, management cautions that future events rarely develop exactly as forecast, and the best estimates may require adjustment.

**Revenue Recognition.** The Company recognizes revenue through (1) fixed price contracts on the sale of uniquely designed systems containing hardware, software and other materials which apply only to the Performance Improvement Solutions segment as well as (2) time and material contracts primarily through Nuclear Industry Training and Consulting support and service agreements.

In accordance with U.S. generally accepted accounting principles ("GAAP"), our Performance Improvement Solutions segment accounts for revenue under fixed-price contracts using the percentage-of-completion method. This methodology recognizes revenue and earnings as work progresses on the contract and is based on an estimate of the revenue and earnings earned to date, less amounts recognized in prior periods. The Company bases its estimate of the degree of completion of the contract by reviewing the relationship of costs incurred to date to the expected total costs that will be incurred on the project. Estimated contract earnings are reviewed and revised periodically as the work progresses, and the cumulative effect of any change in estimate is recognized in the period in which the change is identified. Estimated losses are charged against earnings in the period such losses are identified. The Company recognizes revenue arising from contract claims either as income or as an offset against a potential loss only when the amount of the claim can be estimated reliably and realization is probable and there is a legal basis of the claim. Uncertainties inherent in the performance of contracts include labor availability and productivity, material costs, change order scope and pricing, software modification and customer acceptance issues. The reliability of these cost estimates is critical to the Company's revenue recognition as a significant change in the estimates can cause the Company's revenue and related margins to change significantly from the amounts estimated in the early stages of the project.

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

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

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 as a means to establish the terms and conditions by which our products support and services are sold to our customers. Delivery is considered to have occurred when title and risk of loss have been transferred to the customer, which generally occurs after a license key has been delivered electronically to the customer.

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

The Company recognizes revenue under time and materials contracts primarily from Nuclear Industry Training and Consulting 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.





Impairment of Intangible Assets, including Goodwill. We review goodwill for impairment annually as of December 31 and whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable. We test 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. At December 31, 2015, the Company's \$5.6 million goodwill balance was related to our Nuclear Industry Training and Consulting segment and arose from the acquisition of Hyperspring in November 2014.

Accounting Standards Update ("ASU") 2011-08, Intangibles — Goodwill and Other (Topic 350): Testing Goodwill for Impairment ("ASU 2011-08") permits an entity to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the two-step goodwill impairment test. Under ASU 2011-08, an entity is not required to perform step one of the goodwill impairment test for a reporting unit if it is more likely than not that its fair value is greater than its carrying amount. For our annual goodwill impairment test as of December 31, 2015, we performed a quantitative step one goodwill impairment test and concluded that it was more likely than not fair values of each of our reporting units exceeded their respective carrying values. For our annual goodwill impairment test as of December 31, 2014, we performed a qualitative assessment as permitted by ASU 2011-08 for the goodwill on our reporting units and determined that it was more likely than not that the fair values of each of our reporting units exceeded their respective carrying values.

If it is determined as a result of the qualitative assessment permitted by ASU 2011-08 that the fair value of a reporting unit is greater than its carrying value, then no additional testing is performed. If the Step 0 test indicates the fair value of a reporting unit is less than its carrying value, we perform the additional impairment test in accordance with the provisions of ASC 350, Intangibles — Goodwill and Other.

If it is determined as a result of the qualitative assessment permitted by ASU 2011-08, that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, a two-step impairment test is required. In the first step, we compare the fair value of each reporting unit to its carrying value. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired and we are not required to perform further testing. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit's assets and liabilities in a manner similar to a purchase price allocation, with any residual fair value allocated to goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we record an impairment loss equal to the difference.

Determining the fair value of a reporting unit is judgmental in nature and involves the use of significant estimates and assumptions. These estimates and assumptions include revenue growth rates and operating margins used to calculate projected future cash flows, risk-adjusted discount rates, future economic and market conditions and determination of appropriate market comparables. We base our fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates. In addition, we make certain judgments and assumptions in allocating shared assets and liabilities to determine the carrying values for each of our reporting units. The timing and frequency of our goodwill impairment tests are based on an ongoing assessment of events and circumstances that would indicate a possible impairment. We will continue to monitor our goodwill and intangible assets for impairment and conduct formal tests when impairment indicators are present.

**Capitalization of Computer Software Development Costs.** In accordance with U.S. generally accepted accounting principles, the Company capitalizes computer software development costs incurred after technological feasibility has been established, but prior to the release of the software product for sale to customers. Once the product is available to be sold, the Company amortizes the costs, on a straight line method, over the estimated useful life of the product, which is normally three years. As of December 31, 2015, the Company has net capitalized software development costs of \$1.1 million. 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 investment to its estimated fair value based on future discounted cash flows. The excess of any unamortized computer software costs over the related net realizable value is written down and charged to operations. Significant changes in the sales projections could result in an impairment with respect to the capitalized software that is reported on the Company's consolidated balance sheets.

During the third quarter of 2015, the Company's CEO conducted a review of the Company's organizational and cost structures and software development plans. As a result of this review, the Company terminated further development of its Enterprise Data Management ("EDM") system and concluded that the capitalized software development costs relating to EDM were no longer recoverable. Accordingly during the third quarter of 2015, GSE recorded a \$1.5 million write-down of software development costs which was the full capitalized balance of the EDM configuration management system.

**Valuation of Contingent Consideration for Business Acquisitions.** Acquisitions may include contingent consideration payments based on future financial measures of an acquired company. 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. We believe our estimates and assumptions are reasonable; however, there is significant judgment involved. At each reporting date, the contingent consideration obligation will be revalued to estimated fair value and changes in fair value subsequent to the acquisition will be 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.

**Deferred Income Tax Valuation Allowance.** Deferred income taxes arise from temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements. Management makes a regular assessment of the realizability of the Company's deferred tax assets. In making this assessment, management considers whether it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities and projected future taxable income of the Company in making this assessment. A valuation allowance is recorded to reduce the total deferred income tax asset to its realizable value. As of December 31, 2015, the Company's largest deferred tax asset of \$7.9 million primarily relates to a U.S. net operating loss carryforward of \$21.9 million which expires in various amounts between 2020 and 2035. The amount of U.S. loss carryforward which can be used by the Company each year is limited due to changes in the Company's ownership which occurred in 2003. Thus, a portion of the Company's loss carryforward may expire unutilized. We believe that the Company will achieve profitable operations in future years that will enable the Company to recover the benefit of its net deferred tax assets. However, other than a portion of the net deferred tax assets that are related to the Company's Indian subsidiary, the recovery of the net deferred tax assets could not be substantiated by currently available objective evidence. Accordingly, the Company has established a \$12.1 million valuation allowance for its net deferred tax assets.

## Results of Operations.

The following table sets forth the results of operations for the periods presented expressed as a percentage of contract revenue.

(\$ in thousands)	Years ended December 31,			
	2015	%	2014 <sup>(1)</sup>	%
Contract revenue	\$56,803	100.0%	\$37,536	100.0%
Cost of revenue	42,406	74.7 %	26,744	71.2 %
Write-down of capitalized software development costs	1,538	2.7 %	-	0.0 %
Gross profit	12,859	22.6 %	10,792	28.8 %
Operating expenses				
Selling, general and administrative	14,217	24.9 %	16,306	43.4 %
Restructuring charges	1,791	3.2 %	1,264	3.4 %
Depreciation	493	0.9 %	545	1.5 %
Amortization of definite-lived intangible assets	494	0.9 %	193	0.5 %
Total operating expenses	16,995	29.9 %	18,308	48.8 %
Operating loss	(4,136 )	(7.3 %)	(7,516 )	(20.0 %)
Interest income, net	88	0.2 %	143	0.4 %
Gain (loss) on derivative instruments, net	(40 )	(0.1 %)	209	0.5 %
Other income (expense), net	(146 )	(0.3 %)	1	0.0 %
Loss before income taxes	(4,234 )	(7.5 %)	(7,163 )	(19.1 %)
Provision for income taxes	471	0.8 %	166	0.4 %
Net loss	\$(4,705 ) (8.3 %) \$(7,329 ) (19.5 %)			

(1) Prior year amounts have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods, as described in Note 2 - Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements.

## Comparison of the Years Ended December 31, 2015 to December 31, 2014.

Contract revenue. Contract revenue for the year ended December 31, 2015 totaled \$56.8 million, which was 51.5% higher than the \$37.5 million of revenue for the year ended December 31, 2014. The increase in revenue was primarily driven by the acquisition of Hyperspring which is included in our Nuclear Industry Training and Consulting segment.

	Year ended December 31,	
	2015	2014 <sup>(1)</sup>
(in thousands)		
Contract revenue:		
Performance Improvement Solutions	\$ 37,074	\$ 35,281
Nuclear Industry Training and Consulting	19,729	2,255
Total contract revenue	\$ 56,803	\$ 37,536

(1) Prior year amounts have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods, as described in Note 2 - Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements.

Performance Improvement Solutions revenue increased 5.1% from \$35.3 million to \$37.1 million for the years ended December 31, 2014 and 2015, respectively. We recorded total Performance Improvement Solutions orders of \$36.8 million for the year ended December 31, 2015 as compared to \$40.9 million for the year ended December 31, 2014. The main driver of the revenue increase was the receipt of two contracts from a U.S. utility, one for a gas conversion simulator project in November 2014 and another for a simulator upgrade project in April 2015. Revenue recognized on contracts from this customer increased from \$139,000 in 2014 to \$1.2 million in 2015. In September 2014, the Company was awarded a contract from another U.S. utility for four new full scope fossil operator training simulators. Revenue recognized on these contracts totaled \$2.0 million in 2015 versus \$1.3 million in 2014. In total, revenue from our fossil power simulation business increased from \$5.6 million in 2014 to \$8.2 million in 2015. The increase in our fossil revenue was partially offset by a \$728,000 decrease in revenue from our Swedish subsidiary. This subsidiary was downsized in 2014 following a reduction in their overall order activity reflecting the continuing effect of the 2011 Fukushima Nuclear Plant disaster.

Our Nuclear Industry Training and Consulting segment was created due to the acquisition of Hyperspring on November 14, 2014. Revenue for the year ended December 31, 2015 totaled \$19.7 million. Revenue during 2014 reflects only six weeks of activity from the date of Hyperspring's acquisition through December 31, 2014. Nuclear Industry Training and Consulting orders totaled \$19.2 million for the year ended December 31, 2015.

At December 31, 2015, the Company's backlog was \$47.9 million: \$41.9 million for the Performance Improvement Solutions segment and \$6.0 million for the Nuclear Industry Training and Consulting segment. Performance Improvement Solutions backlog decreased 2.6% from \$43.0 million and Hyperspring backlog decreased 10.4% from \$6.7 million, respectively, as of December 31, 2014.

Write-down of capitalized software development costs. The Company makes ongoing evaluations of the recoverability of its capitalized software projects. During the third quarter of 2015, the Company's CEO conducted a review of the Company's organizational and cost structures and software development plans. As a result of this review, the Company has terminated further development of its Enterprise Data Management ("EDM") system and has concluded that the capitalized software development costs relating to EDM were no longer recoverable.

Accordingly, in the three months ended September 30, 2015, GSE recorded a \$1.5 million write-down of software development costs which was the full capitalized balance of the EDM configuration management system.

Gross profit. Excluding the \$1.5 million write-down of software development costs, gross profit was \$14.4 million for the year ended December 31, 2015 compared to \$10.8 million for the year ended December 31, 2014. As a percentage of revenue, gross profit excluding the \$1.5 million write-down of software development costs decreased from 28.8% for the year ended December 31, 2014 to 25.3% for the year ended December 31, 2015. Consolidated gross profit totaled \$12.9 million or 22.6% of revenue for the year ended December 31, 2015 as compared to \$10.8 million or 28.8% of revenue for the year ended December 31, 2014. The reduction in gross profit in 2015 is mainly due to the Company's acquisition of Hyperspring in November 2014 which has gross profit margins which are substantially lower than the Company's historical gross profit margins.

(\$ in thousands)	Years ended December 31,			
	2015	%	2014 <sup>(1)</sup>	%
Gross profit:				
Performance Improvement Solutions	\$11,995	32.4%	\$10,572	30.0%
Nuclear Industry Training and Consulting	2,402	12.2%	220	9.8%
Consolidated gross profit excluding write-down	14,397	25.3%	10,792	28.8%
Write-down of capitalized software development costs	1,538	2.7%	-	0.0%
Consolidated gross profit	\$12,859	22.6%	\$10,792	28.8%

(1) Prior year amounts have been revised to correct misstatements that were deemed to be immaterial to both the current and prior periods, as described in Note 2 - Summary of Significant Accounting Policies in the accompanying notes to the consolidated financial statements.

Excluding the \$1.5 million write-down of software development costs, the Performance Improvement Solutions segment had gross profit of \$12.0 million or 32.4% of segment revenue for the year ended December 31, 2015 compared to \$10.6 million or 30.0% of segment revenue for the year ended December 31, 2014. The increase in gross margin percent for the year ended December 31, 2015 as compared to the year ended December 31, 2014 is mainly due to (1) the restructuring of our Swedish operations in 2014 which reduced their operational overhead costs and facility expenses in 2015, (2) higher margined engineering and training projects in 2015 for our UK subsidiary, and (3) the completion of a process simulation project in 2014 that had a 14% gross margin.

Nuclear Industry Training and Consulting's 2014 gross margin of 9.8% of segment revenue reflected six weeks of activity, from the acquisition date of Hyperspring through December 31, 2014. For the year ended December 31, 2015, Nuclear Industry Training and Consulting had a gross margin of 12.2% of segment revenue. In 2015, the segment sold more of their higher margined certification training courses and increased the percentage of their revenue from higher margined customers.

Selling, general and administrative expenses. Selling, general and administrative ("SG&A") expenses totaled \$14.2 million and \$16.3 million for the years ended December 31, 2015 and 2014, respectively. Fluctuations in the components of SG&A spending were as follows:

Business development costs decreased from \$5.9 million for the year ended December 31, 2014 to \$4.7 million for the year ended December 31, 2015. The reduction in business development costs in 2015 is largely due to the Company's restructuring actions in 2015 and 2014 which reduced the number of business development personnel. Included within business development costs were our bidding and proposal costs, which are the costs of operations personnel assisting with the preparation of contract proposals. Bidding and proposal costs decreased \$786,000 from the prior year end and totaled \$730,000 for the year ended December 31, 2015. Again, due to the Company's restructuring actions, the number of operations employees was reduced and the participation of the operations personnel in bidding and proposal activities declined.

The Company's general and administrative expenses totaled \$8.0 million and \$7.2 million for the years ended December 31, 2015 and 2014, respectively. The increase of \$0.8 million is primarily attributable to the following:

For the years ended December 31, 2015 and 2014, contingent consideration accretion expense totaled \$849,000 and \$229,000, respectively. The increase in contingent consideration accretion expense is primarily a result of the acquisition of Hyperspring on November 14, 2014 and is associated with the deferred contingent consideration due to the former Hyperspring members if certain EBITDA targets are met.

In 2014, the Company's Board of Directors agreed to waive their fees. These fees were reinstated in 2015 and totaled \$178,000 for the year.

Legal expenses increased by \$99,000 to \$147,000 in 2015 as compared to 2014 largely as a result of the Company's 2015 restructuring activities.

For the year ended December 31, 2014, the Company incurred due diligence and legal costs related to the Hyperspring acquisition of \$265,000.

The Company's Swedish subsidiary increased their bad debt reserve in 2015 by \$101,000.

The Company's new CEO was entitled to a guaranteed bonus of \$112,000 in 2015 per his employment contract.

Gross spending on software product development ("development") expenses, for the year ended December 31, 2015 totaled \$3.1 million, as compared to \$3.8 million for the year ended December 31, 2014. The Company capitalized \$1.6 million and \$0.6 million for the year ended December 31, 2015 and 2014, respectively. Net development spending decreased from \$3.2 million for the year ended December 31, 2014 to \$1.5 million for the year ended December 31, 2015.

Spending on simulation software product development and modeling tools totaled \$2.0 million for the year ended December 31, 2015. For the year ended December 31, 2014, development expense totaled \$2.9 million. The Company's 2015 development expenses were primarily related to a new configuration management system and the enhancement of JADE and SimExec applications. However, the Company wrote off the capitalized costs related to the new configuration management system in the third quarter 2015. See Write-down of capitalized software development costs, above.

The Company's Activ-3Di™ visualization team, which developed 3D technology to add to our training programs, incurred \$111,000 and \$231,000 of costs related to this effort during the years ended December 31, 2015 and 2014, respectively. As part of the Company's 2015 restructuring activities, we shut down the Activ-3Di operations.

Development expense related to the EnVision product line totaled \$1.0 million and \$676,000 for the years ended December 31, 2015 and 2014, respectively. A significant portion of the development expense was related to the development of CBT and simulators for liquid nitrogen gas and natural gas liquefaction.

**Restructuring Charges.** Restructuring charges totaled \$1.8 million and \$1.3 million for the years ended December 31, 2015 and 2014, respectively. The Company's restructuring activities during 2015 and 2014 were as follows:

In July 2015, GSE entered into a separation and release agreement with James Eberle, the former CEO of the Company. Effective July 31, 2015, Mr. Eberle resigned his position as CEO and as a director on GSE's board of directors. The Company incurred a \$380,000 charge in the third quarter 2015 in severance expense related to the termination of Mr. Eberle.

In the third quarter 2015, the Board of Directors of the Company approved restructuring actions for the Company's worldwide operations. For the year ended December 31, 2015, the Company incurred \$1.4 million of restructuring charges including severance expense, facility closing costs, and other restructuring costs. The restructuring actions were designed to deliver cost reductions and operating efficiencies throughout the Company and reduce both operations overheads and selling, general, and administrative expenses.

During the year ended December 31, 2014, the Company incurred restructuring costs of \$611,000 associated with the downsizing of our Swedish operations. We also incurred severance costs of \$653,000 for our U.S. operations for the year ended December 31, 2014.

**Depreciation.** Depreciation expense totaled \$493,000 and \$545,000 for the years ended December 31, 2015 and 2014, respectively.

**Amortization of definite-lived intangible assets.** Amortization expense related to definite-lived intangible assets totaled \$494,000 and \$193,000 for the years ended December 31, 2015 and 2014, respectively.

In conjunction with the Hyperspring acquisition on November 14, 2014, we recorded \$779,000 of customer-related intangible assets which are being amortized on a waterfall basis over seven years. We recognized \$365,000 and \$50,000 of amortization expense for the Hyperspring intangible assets for the years ended December 31, 2015 and 2014, respectively.

The balance of the intangible asset amortization expense for 2015 and 2014 relates to the intangible assets arising from the prior year acquisitions of EnVision Systems, Inc. and TAS Holdings Ltd. Amortization is recognized on a straight-line basis over the estimated useful life of the intangible assets, except for contractual customer relationships and contract backlog which are recognized in proportion to the related projected revenue streams.

**Operating loss.** The Company had an operating loss of \$4.1 million (-7.3% of revenue) for the year ended December 31, 2015, as compared with an operating loss of \$7.5 million (-20.0% of revenue) for the year ended December 31, 2014. The variances were due to the factors outlined above.



Interest income, net. The Company's interest income, net totaled \$88,000 and \$143,000 for the years ended December 31, 2015 and 2014, respectively.

At December 31, 2015, the Company has a \$7.5 million revolving line of credit with BB&T Bank (formerly Susquehanna Bank). The credit facility was established mainly to collateralize letters of credit which are issued as advance payment, bid or performance bonds. The line of credit, which is in the principal amount of up to \$7.5 million, bears interest at a rate equal to the Wall Street Journal Prime Rate of Interest, floating with a floor of 4 ½%. The agreement expires on June 30, 2016.

In 2014, the credit agreement was amended to require that all outstanding letters of credit be cash collateralized in segregated, restricted accounts. At December 31, 2015 and 2014, the Company had approximately \$3.5 million and \$4.2 million, respectively, of cash in escrow accounts with BB&T that were being used as collateral for various advance payment and performance bonds. The Company recorded interest income of \$10,000 and \$7,000 from the escrow accounts for the years ended December 31, 2015 and 2014, respectively. The interest earned on these restricted funds is added to the restricted cash balance.

On November 14, 2014, the acquisition date, Hyperspring had a \$1.0 million working capital line of credit with IberiaBank. Interest was payable monthly at a rate of the prime rate of interest as published in the money rate section of the Wall Street Journal plus 2.50%. The effective rate at November 14, 2014 was 5.750%. The line was secured by all accounts and was guaranteed by the members of Hyperspring. The Company recorded interest expense of \$3,000 from the line of credit for the year ended December 31, 2015.

On December 7, 2014, the working capital line of credit matured while the Company was renegotiating the new terms with IberiaBank subsequent to the acquisition of Hyperspring. On January 22, 2015, a promissory note was executed between Hyperspring and IberiaBank to extend the \$1.0 million line of credit until July 6, 2016. Under the new terms, interest is payable monthly at the rate of 1.00 percentage points over the prime rate of interest as published in the money rate section of the Wall Street Journal. The effective rate at the date of the promissory note was 4.25%. The line is secured by all accounts of Hyperspring and guaranteed by GSE Systems, Inc.

The Company had \$5.4 million and \$7.5 million deposited in unrestricted money market accounts on December 31, 2015 and 2014, respectively. Interest income earned on the money market accounts totaled \$22,000 and \$37,000 for the years ended 2015 and 2014, respectively.

Interest income on deposits held by the Company's foreign subsidiaries decreased from \$102,000 for the year ended December 31, 2014 to \$59,000 for the year ended December 31, 2015. The decrease was primarily attributable to the lower cash balances maintained by the subsidiaries during 2015.

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 December 31, 2015, the Company had foreign exchange contracts outstanding of approximately 2.1 million Euro, 1.3 million Canadian Dollars 0.5 million Pounds Sterling, and 0.4 million Australian Dollars at fixed rates. The contracts expire on various dates through January 2017. The Company had not designated the contracts as hedges and has recognized a loss on the change in the estimated fair value of the contracts of \$6,000 for the year ended December 31, 2015.

At December 31, 2014, the Company had foreign exchange contracts outstanding of approximately 1.4 million Euro, 0.8 million Australian Dollars, 0.5 million Malaysian Ringgits, and 0.3 million Pounds Sterling at fixed rates. The contracts expire on various dates through November 2016. The Company had not designated the contracts as hedges and had recognized a gain on the change in the estimated fair value of the contracts of \$365,000 for the year ended December 31, 2014.

The estimated net fair values of the contracts at December 31, 2015 and 2014 was a net asset of \$64,000 and \$68,000, respectively. The amounts were recorded on the consolidated balance sheets as follows:

	December 31,	
(in thousands)	2015	2014
Asset derivatives		
Prepaid expenses and other current assets	\$ 115	\$ 71
Other assets	6	21
	121	92
Liability derivatives		
Other current liabilities	(57 )	(23 )
Other liabilities	-	(1 )
	(57 )	(24 )
Net fair value	\$ 64	\$ 68

The foreign currency denominated contract receivables that are related to the outstanding foreign exchange contracts at December 31, 2015 are remeasured at the end of each period into the functional currency using the current exchange rate at the end of the period. For the years ended December 31, 2015 and 2014, the Company incurred losses of \$34,000 and \$156,000, respectively, from the remeasurement of such contract receivables.

Other income (expense), net. The Company recognized \$146,000 of other expense, net and \$1,000 of other income, net for the years ended December 31, 2015 and 2014, respectively.

On November 14, 2014, in conjunction with the Hyperspring acquisition, the Company invested \$250,000 for a 50% interest in IntelliQlik, LLC ("IntelliQlik"). For the years ended December 31, 2015 and 2014, the Company recognized equity losses of \$107,000 and \$17,000, respectively, on its investment in IntelliQlik. IntelliQlik is developing a software platform for online learning and learning management for the energy market. The Company was obligated to contribute an additional \$250,000 should IntelliQlik attain certain development milestones by September 30, 2015. Based on a review of the software platform as of September 30, 2015, GSE concluded that the required development milestones had not been met and did not contribute the additional \$250,000 investment. The Company wrote-off the remaining \$126,000 balance of its IntelliQlik investment in the third quarter 2015.

For the year ended December 31, 2014, the Company recognized losses of \$38,000, relating to its pro rata share of operating results from its equity investment in General Simulation engineering RUS Limited Liability Company ("GSE RUS"). The Company's entire investment in GSE-RUS was written off by the end of December 2014, we have not received a request for additional funding from the joint venture and, due to the political issues with Russia regarding the conflict in Ukraine, we do not intend to contribute additional equity in the foreseeable future.

The Company had other miscellaneous income of \$87,000 and \$56,000 for the years ended December 31, 2015 and 2014, respectively.

## Provision for Income Taxes.

The Company files tax returns in the United States federal jurisdiction and in several state and foreign jurisdictions. Because of the net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from years 1997 and forward and is subject to foreign tax examinations by tax authorities for years 2008 and forward. Open tax years related to state and foreign jurisdictions remain subject to examination but are not considered material to our financial position, results of operations or cash flows.

The Company's tax expense in 2015 was \$471,000 and consisted of \$12,000 state income taxes, \$110,000 foreign income taxes from the Company's foreign subsidiaries, \$18,000 for foreign income tax credits on several non-U.S. contracts, \$221,000 of foreign income tax liabilities, and a \$146,000 deferred tax liability relating to the tax amortization of goodwill that cannot be offset by deferred tax assets because the anticipated reversal of the deferred tax liability is outside of the anticipated reversal of the deferred tax assets.

The Company's tax expense in 2014 was \$166,000 and consisted of \$10,000 state income taxes, \$1,000 foreign income taxes from the Company's foreign subsidiaries, \$55,000 for foreign income tax withholding on several non-U.S. contracts, \$76,000 of foreign income tax liabilities, and \$24,000 deferred tax liability relating to the tax amortization of goodwill that cannot be offset by deferred tax assets because the anticipated reversal of the deferred tax liability is outside of the anticipated reversal of the deferred tax assets.

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.

During 2015 and 2014 the Company recorded \$130,000 and \$23,000 respectively, of tax liabilities for certain foreign tax contingencies. In 2014 the Company accrued \$2,000 of interest and penalties related to its domestic uncertain tax positions. These uncertain positions expired in 2015. In 2014 the Company accrued no interest and penalties related to its foreign uncertain tax positions; \$167,000 was accrued in 2015.

The Company has a full valuation allowance on its U.S., Swedish, and Chinese net deferred tax assets at December 31, 2015.

## Liquidity and Capital Resources.

As of December 31, 2015, GSE had cash and cash equivalents of \$11.1 million compared to \$13.6 million at December 31, 2014.

Cash provided by operating activities. For the year ended December 31, 2015, net cash provided by operating activities totaled \$1.0 million. Significant changes in the Company's assets and liabilities for the year ended December 31, 2015 included:

A \$2.5 million decrease in the Company's contracts receivable. The Company's trade receivables, net of the allowance for doubtful accounts, decreased from \$10.8 million at December 31, 2014 to \$9.7 million at December 31, 2015. Through February 29, 2016, the Company collected 73% of the gross trade receivables outstanding as of December 31, 2015. The Company's unbilled receivables decreased by \$1.7 million to \$3.3 million at December 31, 2015. The decrease in the unbilled receivables is due to the timing of contracted billing milestones of the Company's current projects. In January and February 2016, the Company invoiced \$1.7 million of the unbilled amounts; the balance of the unbilled amounts is expected to be invoiced within one year. At December 31, 2015, trade receivables outstanding for more than 90 days totaled \$0.7 million compared to \$0.4 million at December 31, 2014.

A \$0.5 million increase in prepaid expenses and other assets.

A \$0.9 million decrease in accounts payable, accrued compensation and accrued expenses.

A \$0.6 million decrease in billings in excess of revenue earned. The decrease is due to the timing of contracted billing milestones of the Company's current projects.

For the year ended December 31, 2014, net cash provided by operating activities totaled \$6.6 million. Significant changes in the Company's assets and liabilities for the year ended December 31, 2014 included:

A \$10.3 million decrease in the Company's contracts receivable. The Company's trade receivables, net of the allowance for doubtful accounts, decreased from \$19.0 million at December 31, 2013 to \$10.8 million at December 31, 2014. The Company's unbilled receivables decreased by \$0.5 million to \$5.1 million at December 31, 2014. The decrease in the unbilled receivables was due to the timing of contracted billing milestones of the Company's current projects. At December 31, 2014, trade receivables outstanding for more than 90 days totaled \$0.4 million compared to \$0.6 million at December 31, 2013.

A \$2.4 million decrease in prepaid expenses and other assets. In 2013, the Company agreed to sell its 49% stake in GSE-UNIS Simulation Engineering Co., Ltd to its partner, Beijing Unis Venture Capital Co., Ltd. for \$1.2 million and terminate the joint venture agreement as of July 31, 2013. We received the \$1.2 million in December 2014. At December 31, 2013, the Company had a \$0.4 million receivable for Value Added Tax refund related to our Slovakia project which was collected in 2014. Our Swedish subsidiary applied \$0.3 million of prepayments to pay the Swedish Tax Agency.

A \$2.1 million decrease in accounts payable, accrued compensation and accrued expenses. At December 31, 2013 the Company had a \$1.1 million accounts payable due to Siemens in conjunction with its Slovak project; the payment was made in 2014. The Company's December 31, 2014 subcontractor accrual decreased \$372,000 due to the progression of work on several projects utilizing subcontractor labor and the related timing of the billing milestones on those contracts.

A \$2.4 million increase in billings in excess of revenue earned. The increase was due to the timing of contracted billing milestones of the Company's current projects.

Cash Used in Investing Activities. For the year ended December 31, 2015, net cash used in investing activities was \$1.2 million.

The Company made capital expenditures of \$277,000 and capitalized software development costs of \$1.6 million for the year ended December 31, 2015. The net amount of cash released as collateral for standby letters of credit, bank guarantees and foreign currency contracts was \$654,000 for the year ended December 31, 2015.

For the year ended December 31, 2014, net cash used in investing activities was \$7.3 million.

The Company made capital expenditures of \$398,000 and capitalized software development costs of \$646,000 for the year ended December 31, 2014. The net amount of cash restricted as collateral for standby letters of credit, bank guarantees and foreign currency contracts was \$3.1 million for the year ended December 31, 2014.

Effective November 14, 2014, GSE Power Systems Inc., completed the acquisition of Hyperspring. At closing, we paid the Sellers an aggregate of \$3.0 million in cash. According to the Purchase Agreement, a \$1.2 million payment was due to the former Hyperspring members if Hyperspring were successful in renewing its contract with the Tennessee Valley Authority ("TVA") for a two year period for substantially the same scope as was currently being provided and with substantially the same economics. On September 24, 2015, TVA executed a three-year renewal contract with Hyperspring; accordingly the Company paid the \$1.2 million payment to the former Hyperspring members in October 2015. Based upon the EBITDA ("Earnings Before Interest, Taxes, Depreciation and Amortization") attained by Hyperspring for the twelve months ended November 13, 2015, the Company was required to pay the Sellers an additional \$1.4 million which was paid in January 2016. In addition, the Company may be required, pursuant to the terms of the Purchase Agreement, to pay the Sellers up to an additional \$4.8 million if Hyperspring attains certain EBITDA targets for the two-year period ending November 13, 2017. Accordingly, the total cash paid to the Hyperspring members may total \$10.4 million. The estimated fair value of the purchase price recorded by the Company totaled \$7.0 million.

In connection with the Hyperspring acquisition, the Company also invested \$250,000 in IntelliQlik, LLC in exchange for a 50% interest in IntelliQlik pursuant to the terms of the Operating Agreement dated as of November 14, 2014. The other 50% of IntelliQlik is owned by one of the members of Hyperspring.

Cash Used in Financing Activities. For the year ended December 31, 2015, net cash used in financing activities totaled \$2.0 million.

During the year ended December 31, 2015, the Company made payments of \$500,000 and \$1.2 million to the former owners of EnVision and Hyperspring, respectively, in accordance with the governing purchase agreements.

Hyperspring has a \$1.0 million working capital line of credit with IberiaBank. The Company paid down \$339,000 of the outstanding balance of the line of credit during the year ended December 31, 2015, and made no new borrowings against the line of credit in 2015.

For the year ended December 31, 2014, net cash used in financing activities totaled \$910,000.

The Company paid down \$410,000 of the outstanding balance of the \$1.0 million line of credit with IberiaBank in the six weeks between the acquisition date of November 14, 2014 and December 31, 2014.

During the year ended December 31, 2014, the Company made payments totaling \$500,000 to the former shareholders of EnVision in accordance with the purchase agreement.

## Credit Facilities

## Branch Banking and Trust Bank ("BB&amp;T")

At December 31, 2015, the Company had a Master Loan and Security Agreement and Revolving Credit Note with BB&T Bank. The Company's former bank, Susquehanna Bank, was acquired by BB&T Bank effective November 8, 2015. The Company and its subsidiary, GSE Performance Solutions, Inc. are jointly and severally liable as co-borrowers. The Loan Agreement provides a \$7.5 million revolving line of credit for the purpose of (i) issuing stand-by letters of credit and (ii) providing working capital. Working capital advances bear interest at a rate equal to the Wall Street Journal Prime Rate of Interest, floating with a floor of 4 ½%. The agreement expires on June 30, 2016.

As collateral for the Company's obligations, the Company granted a first lien and security interest in all of the assets of the Company, including but not limited to, accounts receivable, proceeds and products, intangibles, trademarks, patents, intellectual property, machinery and equipment.

On September 9, 2014, the Company signed a Third Comprehensive Amendment to the Master Loan and Security Agreement. According to the Third Amendment, the Company is to maintain a segregated cash collateral account at Susquehanna Bank (now BB&T Bank) equal to the greater of (i) \$3.0 million or (ii) the aggregate principal amounts of all Loans outstanding under the Revolving Credit Facility (including any issued and outstanding letters of credit, working capital advances, and negative foreign exchange positions) as security for the Company's obligations. Under this Amendment, BB&T Bank shall have complete and unconditional control over the cash collateral account.

On September 30, 2014, Susquehanna Bank collateralized the outstanding letters of credit issued under the line of credit. At December 31, 2015, total restricted cash on the balance sheet was \$3.6 million which included \$3.5 held in the cash collateral account.

The credit agreements contain certain restrictive covenants regarding future acquisitions and incurrence of debt. On July 31, 2015, the Company signed a Fifth Comprehensive Amendment to the Master Loan and Security Agreement in which the Company's financial covenants were reduced from four to two, and the covenant targets were adjusted.

Covenant	As of December 31, 2015
Minimum tangible capital base	Must exceed \$10.5 million \$10.8 million
Quick ratio	Must exceed 1.00 : 1.00 1.44 : 1.00

As of December 31, 2015, the Company was in compliance with of its financial covenants as defined above.

### IberiaBank

On November 14, 2014, the acquisition date, Hyperspring had a \$1.0 million working capital line of credit with IberiaBank. Hyperspring used the IberiaBank line of credit as needed mainly to provide for payroll funding. The line was replenished through collection of receivables obtained in the following weeks. Interest was payable monthly at a rate of the prime rate of interest as published in the money rate section of the Wall Street Journal plus 2.50%. The effective rate at November 14, 2014 was 5.750%. The line was secured by all accounts and was guaranteed by the members of Hyperspring.

On December 7, 2014, the working capital line of credit matured while the Company was renegotiating the new terms with IberiaBank subsequent to the acquisition of Hyperspring. On January 22, 2015, a promissory note was executed between Hyperspring and IberiaBank to extend the \$1.0 million line of credit. Under the new terms, interest is payable monthly at the rate of 1.00 percentage points over the prime rate of interest as published in the money rate section of the Wall Street Journal. The effective rate at the date of the promissory note was 4.25%. The line is secured by all accounts of Hyperspring and guaranteed by GSE Systems, Inc. The maturity date of the line of credit is July 6, 2016.

At December 31, 2014 the outstanding balance on the line of credit was \$339,000. The outstanding balance on the line of credit was repaid in 2015 and no additional borrowings have been made against the line of credit.

### Contractual Commitments

The following summarizes the Company's contractual cash obligations as of December 31, 2015 and the effect these obligations are expected to have on its liquidity and cash flow in future periods:

#### Payments Due by Period

(in thousands)

	Total	Less than 1 year	1-3 Years	4-5 Years	After 5 Years
Subcontractor and purchase commitments	\$4,196	\$ 3,761	\$ 435	\$ -	\$ -
Net future minimum lease payments	5,653	1,036	1,701	1,354	1,562
Total	\$9,849	\$ 4,797	\$ 2,136	\$ 1,354	\$ 1,562

As of December 31, 2015, the Company was contingently liable for twelve standby letters of credit and one surety bond totaling \$3.6 million which represented advance payment and performance bonds on twelve contracts. The Company has deposited the full value of twelve standby letters of credit, \$3.5 million, into money market escrow accounts which have been restricted in that the Company does not have access to these funds until the related letters of credit have expired. The cash has been recorded on the Company's consolidated balance sheets at December 31, 2015 as restricted cash and long-term restricted cash depending on the expiration date of the underlying letters of credit. As of December 31, 2014, the Company was contingently liable for twelve standby letters of credit and one surety bond totaling \$4.2 million which represented advance payment and performance bonds on eleven contracts. The Company had deposited the full value of eleven standby letters of credit, \$4.2 million, into money market escrow accounts which had been restricted in that the Company did not have access to these funds until the related letters of credit have expired. The cash was recorded on the Company's consolidated balance sheets at December 31, 2014 as restricted cash and long-term restricted cash depending on the expiration date of the underlying letters of credit.



## 2015 Liquidity Outlook

At December 31, 2015, the Company had cash and cash equivalents of \$11.1 million and \$3.5 million of restricted cash.

The Company has a Master Loan and Security Agreement and Revolving Credit Note with BB&T Bank. The Company's former bank, Susquehanna Bank, was acquired by BB&T Bank effective November 8, 2015. The Loan Agreement provides a \$7.5 million revolving line of credit for the purpose of (i) issuing stand-by letters of credit and (ii) providing working capital. Working capital advances bear interest at a rate equal to the Wall Street Journal Prime Rate of Interest, floating with a floor of 4 ½%. The two year agreement expires on June 30, 2016.

Under the Agreement, the Company is to maintain a segregated cash collateral account at Susquehanna Bank (now BB&T Bank) equal to the greater of (i) \$3.0 million or (ii) the aggregate principal amounts of all Loans outstanding under the Revolving Credit Facility (including any issued and outstanding letters of credit, working capital advances, and negative foreign exchange positions) as security for the Company's obligations. Under this Amendment, BB&T Bank shall have complete and unconditional control over the cash collateral account. At December 31, 2015 we were required to maintain cash balances of \$3.5 million at BB&T Bank in segregated cash collateral accounts.

The Company has a \$1.0 million working capital line of credit with IberiaBank. We draw on this line of credit as needed mainly to provide for Hyperspring's payroll funding. The line is replenished through collection of receivables obtained in the following weeks. On January 22, 2015, a promissory note was executed between Hyperspring, LLC and IberiaBank to extend the \$1.0 million line of credit. Under the new terms, interest is payable monthly at the rate of 1.00 percentage points over the prime rate of interest as published in the money rate section of the Wall Street Journal. The effective rate at the date of the promissory note was 4.25%. The line is secured by all accounts of Hyperspring and guaranteed by GSE Systems, Inc. The maturity date of the line of credit is July 6, 2016. At December 31, 2015, the Company did not have any outstanding balance on its line of credit.

In the third quarter 2015, the Board of Directors approved restructuring actions for the Company's worldwide operations. Thirty-six employees were terminated at the end of September, and we closed our offices in Cary NC, Madison NJ, and Tarrytown NY. Subsequent to these restructuring actions, the Company has hired several executive staff, including an Interim Chief Operating Officer, a new Senior VP, General Counsel and Risk Management Officer, a Senior VP of Sales, and a Chief Technology Officer. We believe that the net benefit of these actions will save the Company approximately \$3.9 million of cash on an annual basis.

The Company has entered into 2016 with \$47.9 million of backlog; \$30.2 million of which is expected to convert to revenue in 2016. The Company anticipates that its normal operations will generate all of the funds necessary to fund its consolidated operations during the next twelve months. The Company believes that it will have sufficient liquidity and working capital without additional financing. Notwithstanding the foregoing, the Company may be required to look for additional capital to fund its operations if the Company is unable to operate profitably and generate sufficient cash from operations. There can be no assurance that the Company would be successful in raising such additional funds if needed.

Foreign Exchange.

A portion of the Company's international sales revenue has been and may be received in a currency other than the currency in which the expenses relating to such revenue are paid. Accordingly, the Company periodically enters into forward foreign exchange contracts to manage the market risks associated with the fluctuations in foreign currency exchange rates.

Off-balance Sheet Obligations.

The Company has no off-balance sheet obligations as of December 31, 2015, except for its operating lease commitments and outstanding letters of credit and surety bonds. See Contractual Cash Commitments above.

Other Matters.

Management believes inflation has not had a material impact on the Company's operations.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

The Company's market risk is principally confined to changes in foreign currency exchange rates. During the year ended December 31, 2015, 15% of the Company's revenue was from contracts which required payments in a currency other than U.S. Dollars, principally British Pounds Sterling (8.1%), Chinese Renminbi (3.4%), Euros (1.4%), Australian Dollars (0.7%), Japanese Yen (0.3%), Canadian Dollars (0.2%) and Swedish Krona (0.5%). For the year ended December 31, 2014, 29% of the Company's revenue was from contracts which required payments in a currency other than U.S. Dollars, principally Euros, Swedish Krona, British Pounds Sterling, Chinese Renminbi, Canadian Dollars and Japanese Yen.

In addition, for the years ended December 31, 2015 and 2014, 3% and 9% of the Company's expenses were incurred in Swedish Krona and 6% and 11% of the Company's expenses were incurred in Pounds Sterling, respectively. The Company's exposure to foreign exchange rate fluctuations arises in part from inter-company accounts in which costs incurred in one entity are charged to other entities in different foreign jurisdictions. The Company is also exposed to foreign exchange rate fluctuations as the financial results of all foreign subsidiaries are translated into U.S. dollars in consolidation. As exchange rates vary, those results when translated may vary from expectations and adversely impact overall expected profitability.

The Company utilizes forward foreign currency exchange contracts to manage market risks associated with the fluctuations in foreign currency exchange rates. The principal currencies for which such forward exchange contracts are entered into are the Pound Sterling, the Euro and the Japanese Yen. It is the Company's policy to use such derivative financial instruments to protect against market risk arising in the normal course of business in order to reduce the impact of these exposures. The Company minimizes credit exposure by limiting counterparties to nationally recognized financial institutions.

As of December 31, 2015, the Company had foreign exchange contracts outstanding of approximately 2.1 million Euros, 1.3 million Canadian Dollars, 0.5 million Pounds Sterling, and 0.4 million Australian Dollars at fixed rates. The contracts expire on various dates through January 2017.

At December 31, 2014, the Company had foreign exchange contracts outstanding of approximately 1.4 million Euros, 0.8 million Australian Dollars, and 0.5 million Malaysian Ringgits, 0.3 million Pounds Sterling, at fixed rates. The contracts expire on various dates through November 2016.

The Company had not designated the contracts as hedges and has recorded a loss on the change in the estimated fair value of the contracts of \$6,000 for the year ended December 31, 2015. The estimated fair value of the contracts was recorded as a net asset totaling \$64,000 at December 31, 2015. The Company recognized a gain of \$365,000 for the year ended December 31, 2014, on the changes in fair value of its forward currency exchange contracts. A 10% fluctuation in the foreign currency exchange rates up or down as of December 31, 2015 would have

increased/decreased the change in estimated fair value of the contracts by \$6,400.

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ITEM 8. FINANCIAL STATEMENTS AND  
SUPPLEMENTARY DATA.

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Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders  
GSE Systems, Inc.  
Sykesville, Maryland

We have audited the accompanying consolidated balance sheets of GSE Systems, Inc. as of December 31, 2015 and 2014 and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the two years in the period ended December 31, 2015. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of GSE Systems, Inc. at December 31, 2015 and 2014, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP

McLean, Virginia  
March 25, 2016

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## PART I - FINANCIAL INFORMATION

## Item 1. Financial Statements

## GSE SYSTEMS, INC. AND SUBSIDIARIES

## CONSOLIDATED BALANCE SHEETS

(in thousands, except share data)

	December 31,	
ASSETS	2015	2014
Current assets:		
Cash and cash equivalents	\$ 11,084	\$ 13,583
Restricted cash	1,771	613
Contract receivables, net	13,053	15,768
Prepaid expenses and other current assets	2,506	1,994
Total current assets	28,414	31,958
Equipment, software and leasehold improvements	7,003	7,055
Accumulated depreciation	(5,407 )	(5,229 )
Equipment, software and leasehold improvements, net	1,596	1,826
Software development costs, net	1,145	1,414
Goodwill	5,612	5,612
Intangible assets, net	775	1,279
Long-term restricted cash	1,779	3,591
Other assets	50	548
Total assets	\$ 39,371	\$ 46,228
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Line of credit	\$-	\$ 339
Accounts payable	1,238	2,330
Accrued expenses	1,723	1,554
Accrued compensation	2,431	2,595
Billings in excess of revenue earned	9,229	9,915
Accrued warranty	1,614	1,456
Current contingent consideration	2,647	2,842
Other current liabilities	826	473
Total current liabilities	19,708	21,504
Contingent consideration	1,085	1,948
Other liabilities	210	38
Total liabilities	21,003	23,490