GSE SYSTEMS INC
Form 10-K
March 11, 2013

Conformed

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)
[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2012
OR
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ____ to ____
Commission File Number 001-14785
GSE Systems, Inc.
(Exact name of registrant as specified in its charter)

Delaware	52-1868008
(State of incorporation)	(I.R.S. Employer Identification Number)
1332 Londontown Blvd., Suite 200, Sykesville MD	21784
(Address of principal executive offices)	(Zip Code)

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

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 [ ] No [X]

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

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 [X] No [ ]

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 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 [X] No [ ]

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 [ ] (Do not check if a smaller reporting company)	Smaller reporting company [X]

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

The aggregate market value of Common Stock held by non-affiliates of the Registrant was $41,205,036 on June 30, 2012, 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 $2.30.

The number of shares outstanding of the registrant’s Common Stock as of March 8, 2013 was 18,330,837 shares.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the 2013 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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*to be incorporated by reference from the Proxy Statement for the registrant's 2013 Annual Meeting of Shareholders.

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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 and Section 21E of the Exchange Act that are based on management's assumptions, expectations and projections about us, and the industry within which we operate, that have been made pursuant to the Private Securities Litigation Reform Act of 1995 which reflect 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", " 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 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 and the U.S. military;
- changes in the financial condition of our customers;
- changes in 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 or where equipment or services are or may be provided;
- 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 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.

PART I

ITEM 1. BUSINESS.

GSE Systems, Inc. ("GSE Systems", "GSE", the "Company", "our", "we" or "us"), a Delaware corporation organiz March 1994, is a world leader in real-time, high fidelity simulation. The Company provides simulation, educational, and engineering solutions and services to the nuclear and fossil electric utility industry and the chemical and petrochemical industries. As of December 31, 2012, GSE was the parent company of:

- GSE Power Systems, Inc., a Delaware corporation;
- GSE Power Systems, AB, a Swedish corporation;
- GSE Engineering Systems (Beijing) Co. Ltd., a Chinese limited liability company;
- GSE Systems, Ltd., a Scottish limited liability company;
- TAS Engineering Consultants Ltd., an English limited liability company.
- GSE EnVision, LLC, a New Jersey limited liability company; and
- EnVision Systems (India) Pvt. Ltd., an Indian limited liability company.

The Company has a 49% minority interest in GSE-UNIS Simulation Technology Co., Ltd. a Chinese limited liability company and has a 10% minority interest in Emirates Simulation Academy, LLC ("ESA"), a United Arab Emirates limited liability company. The Company has only one reportable segment.

The Company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act (15 U.S.C. 78m(a) or 78o(d) will be made available free of charge through the Investor Relations section of the Company's Internet website (http://www.gses.com) as soon as practicable after such material is electronically filed with, or furnished to, the SEC. In addition, the public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov.

Recent Developments.

In 2012 the Company embarked on a comprehensive market research program to identify future needs and validate why our customers buy from us. The market research showed that our customers buy from us due to our expertise in the industry, bandwidth of resources and the value driven by our high fidelity solutions. The research also defined the emerging needs of the energy industry. As a result, we have created a clear statement that reflects our promise to our customers. Our promise is "to provide next-generation simulation, training, and engineering services, applying a world of industry experience to help you achieve the performance you imagine."

Over the past 18 months the Company has taken steps toward these new solutions. The acquisition of EnVision Systems has provided a broader portfolio of computer-based training and generic simulation products. The acquisition of TAS Automation has provided an expanded capability in engineering services and has seamlessly

integrated in the GSE corporate brand as GSE Engineering Services. Our visualization training solutions have continued to develop and will be known under the product line Activ-3Di™.

It has been over 2 years now since a 9.0 magnitude earthquake and subsequent tsunami occurred along the northeast coast of Japan which damaged the Fukushima Daiichi I Nuclear Power Plant, which is maintained by the Tokyo Electric Power Company (TEPCO). Since that time, the role of nuclear power in the worldwide energy mix has started to clarify its policies and regulations.

In Japan, tough new rules for Japanese nuclear power plants have been revealed in draft form. Among them are that power companies should be able to contain a severe accident situation for an entire week without outside help. The draft proposals for accident prevention and mitigation came from Japan's newly established Nuclear Regulation Authority (NRA), which has enough independence to do its work free from governmental control and undue industrial influence. Most of the draft requirements are directly inspired by the Fukushima accident and the troubles experienced by TEPCO and government agencies in containing a loss of power brought on by tsunami flooding. Utilities will be required to provide alternative, possibly mobile, power supplies and multiple sources of cooling water. All reactors will also need filtered vents to allow potentially explosive hydrogen to escape safely in the event of serious core damage.

According to a new report entitled European Nuclear Power Sector: Trends and Opportunities, “nuclear energy shows potential to reduce emissions and dependence on fossil fuels, and therefore, will be a major contributor to the European energy mix in 2020." Additionally, the consulting firm Frost & Sullivan believes nuclear energy is the European Union's answer to meeting aggressive targets on carbon dioxide emissions while reducing dependency on fossil fuels. The report notes that, despite the accident at the Fukushima Daiichi plant in Japan, the number of nuclear power reactors under construction worldwide "is still higher now than across the last two decades." France, Finland, the UK and Sweden have all reaffirmed their commitment to nuclear power, while Poland, Romania and the Czech Republic are also planning to push ahead with new units, following increased safety assessments. According to Frost & Sullivan, nuclear plant life extensions represent a bigger market over the next 20 years than new build for the current nuclear supply chain. Life extension projects are likely to take place at plants with a combined generating capacity of 132 GWe.

With all but one of the UK's existing nuclear power plants due to retire by 2023, the cross-party Energy and Climate Change Committee's inquiry was prompted by concerns over potential barriers to new-build plans. The committee's newly released report - entitled Building New Nuclear: The Challenges Ahead - finds that unless planned nuclear power plants are built on time, it will be "extremely challenging, if not impossible" for the country to meet its legally binding long-term carbon reduction targets. A failure to build the currently planned 16 GWe of new nuclear capacity by 2025 would also force greater reliance on imported gas, affecting energy security.

On March 9, 2012, the U.S. Nuclear Regulatory Commission (NRC) approved the first three new regulatory requirements to deal with safety issues based on eight changes identified by the NRC’s Fukushima task force, with implementation required by the end of 2016. The three orders require safety enhancements of operating reactors, construction permit holders, and combined license holders. These orders require nuclear power plants to implement safety enhancements related to (1) mitigation strategies to respond to extreme natural events resulting in the loss of power at plants, (2) ensuring reliable hardened containment vents, and (3) enhancing spent fuel pool instrumentation. In addition, the NRC requested that each reactor reevaluate the seismic and flooding hazards at their site using present-day methods and information.

In addition, the U.S. Department of Energy announced in November 2012 that it would support accelerated development of the design for early adoption of the Small Modular Reactor (SMR) being designed by Babcock & Wilcox known as the mPower™ reactor. A second round of financial support for another SMR design is expected in 2013.

On May 31, 2012, the State Council, China’s Cabinet, approved a nuclear safety plan for 2011 through 2015 following a nine month safety inspection of China’s 41 nuclear power plants, which are either operating or under construction. The inspection reportedly showed that most of China’s nuclear power stations meet both Chinese and International Atomic Energy Agency standards. According to the Council’s statements, the main issues have been for some nuclear power plants to meet new standards on flood protection and for some research reactors to meet new earthquake requirements. Some power plants must also develop better procedures for severe accident prevention and

mitigation. Although the Chinese government has not made a decision on when to start approving new nuclear plant projects, there are signs that the decision may come soon. China National Nuclear Power, the biggest nuclear power developer in the country, announced plans to raise money for projects worth more than $27 billion through what could be one of the biggest initial public offerings (IPO) in China and the first for a nuclear power company. The Ministry of Environmental Protection has approved the IPO plan, which must still be submitted to the China Securities Regulatory Commission for approval.

Previous nuclear accidents have resulted in new regulations requiring additional operator training, higher fidelity models and new testing scenarios. Accordingly, as evidenced by the new safety rules that the NRC has recently issued, the Chinese State Council's Safety Plan, and the debate in Japan as to the need for new regulatory guidelines, it is likely that there will be additional governmental regulations requiring plant modifications and new testing scenarios that will result in the need for higher simulator fidelity, such as that designed and supplied by GSE.

GSE has developed PSA-HD™, an engineering-grade nuclear simulation solution that allows operations personnel to train for and develop responses to severe accident scenarios based on the operations of their specific facility. PSA-HD utilizes MAAP 5.0 as the calculation engine, with GSE's real-time executive and graphical interface to provide a dynamic, real-time solution for severe accident analysis. MAAP 5.0 is an Electric Power Research Institute (EPRI) software program that performs severe accident analysis for nuclear power plants including assessments of core damage and radiological transport. A valid license to MAAP 5.0 from EPRI is required to use MAAP 5.0 with PSA-HD. PSA-HD's real-time code can be integrated with a nuclear plant's existing full-scope training simulator and is applicable to all current nuclear plant designs. PSA-HD can be used to validate the utility's severe accident management guidelines (SAMGs), demonstrate the safety of current plant designs to regulators and stakeholders, and identify potential issues with existing plant design that may require modification. PSA-HD includes high-fidelity models of the plant's reactor core, containment structures and spent fuel pool. The models simulate severe accident conditions which mirror those that occurred at the Fukushima facility, such as the release of radioactive materials due to overheating of the core, exposure of the fuel rods in the spent fuel pool, and hydrogen build up in the containment building.

In addition, GSE anticipates more sophisticated modeling of plant electrical systems to take into account the potential for long term power outages, and decisions that plant operators must make on key equipment and battery life. GSE has been contracted to upgrade several simulators with more detailed electrical system models and we anticipate this trend to continue.

Besides new employees, the dramatic increase in energy demand world-wide over the next 30 years will require new plants of all sources, too. Obviously, these new plants will need to be engineered and designed prior to construction, and GSE's modeling tools are being used more and more to verify and validate control system design and overall plant designs. Finding design errors during engineering rather than construction allows plant startup to occur sooner saving countless dollars and allowing revenue generation sooner. GSE is developing new design solutions leveraging our high fidelity simulation models to improve and streamline the plant engineering process.

As the energy industries continue to build power generation capacity and extend the useful life of current assets, GSE is using its sophisticated simulation to de-risk new development projects. Our technology and experienced staff enable clients to view design scenarios virtually, identify and correct problems before construction, avoid delays and more effectively design human machine interaction. In a simulator is the first time customers see their plant running; the first time they can test the interface between systems manufactured by different suppliers. Finding issues pre-construction or early in construction can save valuable time and money, ensuring on-time start-up of capital assets.

GSE products such as ControlSimTM and ISISTM are used to help customers to rapidly design and test plant instrumentation and control (I&C) and human factors interface (HMI) design. GSE has integrated its proven simulation tools with its new centralized data repository and revision management system into a platform for I&C and HMI design engineers. ControlSim is designed for rapid development and testing of plant control and logic strategies and HMI design. GSE has added the ability to publish the resulting model as engineering drawings in PDF or AutoCAD formats with relevant data such as the I/O list, set points and other constants in electronic or document formats. GSE's ISIS central database is a distributed, powerful system to support the management of data on complex multi-year projects, automate tedious processes to reduce engineering hours, and provide a central point for integration of all GSE or 3rd party engineering design applications into a cohesive simulator development system.

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According to the U.S. Energy Information Administration (EIA), world energy consumption is forecasted to increase by 52% from 505 quadrillion BTU in 2008 to 770 quadrillion BTU in 2035. New consumption means new production, which means new plants, new workers, and an enormous amount of training to provide a skilled workforce. A compounding problem is facing the energy industry. While experiencing rapid growth requiring new plants and new workers, the incumbent industry workforce is aging and facing dramatic turnover. Per the Nuclear Energy Institute (NEI), as of 2008 nearly 38% of the U.S. nuclear power industry will be eligible to retire by 2013. According to the Center for Energy Workforce Development (CEWD), an estimated 46% of the current energy industry workforce may need to be replaced by 2015 due to attrition and retirement. While the data is readily available in the nuclear industry because it is so heavily regulated, similar demographics exist in the fossil, oil & gas, chemical and petrochemical industries. The impact of this pending workforce turnover has been somewhat delayed due to the recent global economic downturn which has forced many employees to postpone their retirements. Accordingly, the Company anticipates that in the near future, a larger number of employees are likely to retire within a shorter time span, and the need to find qualified employees to replace them will become an acute issue.

GSE recognized this growing need for energy industry training several years ago and began developing various training solutions leveraging the use of our simulation technology. GSE created a 163 module, five-simulator training course that was sold to the Emirates Simulation Academy LLC, in the UAE, a training academy that was created by GSE and two other partners in 2007. The Company worked with the University of Strathclyde in Glasgow, Scotland to incorporate GSE's simulation into the University's degreed and industrial education programs. GSE developed a 20-week "Nuclear Operator Jump Start Training Program" for Southern Nuclear Company in Augusta, GA utilizing the Company's VPanel™ interactive visual training simulator. The advantage of the VPanel simulator is its scalability and ease of configuration for both team and individual training, plant specific or cross training. The VPanel allows customers to utilize their existing simulator load while bringing many full scope simulator capabilities directly into the classroom for a fraction of the cost. The "Operator Jump Start" program helps customer's screen and train new operator candidates. This training program is designed to provide essential knowledge and skills to potential nuclear plant operators and to determine if candidates have the ability to successfully complete the customer's own operator licensing programs. The program includes instruction on fundamental sciences (including Generic Fundamentals Examinations "GFES"), plant components, systems, and operations.

Standard classroom training will not provide the efficacy that will be needed nor satisfy the interest level of the new workforce. In fact, according to the NTL Institute's statistics on adult learner retention only 5% of information is retained from lecture, and only 10% from reading. However, 75% retention is accomplished when learners practice by doing. These statistics support GSE's contention that a blended learning approach is needed which combines instructor-led training, simulation and visualization in an optimal combination to increase student competency.

Based upon both the potential turnover of personnel in the energy industry, advancements in visualization technologies and price points, as well as learning styles of the next generation of workers, GSE has embarked on a bold strategy to "Change the Way the Energy Industry Learns." Over the past few years GSE has engaged in a structured approach to the market. First, anticipating the needs, the Company made some strategic hires of programmers, engineers, and marketing people experienced in industrial applications of serious gaming technology. We then piloted a variety of visualization applications to determine market interests. The next steps are to connect with the right partners and channels to market and then build-out our product portfolio. To date, products are being developed for a wide variety of applications including a "glass reactor", which allows students to manipulate the simulation models and see what would happen inside the reactor core, as well as other virtual equipment that can be used for anything from fundamental training to complex maintenance operations.

Case studies demonstrate that the inclusion of "serious gaming" technology such as immersive 3D environments can reduce training time and improve learning significantly. In fact, the Royal Canadian Army was able to reduce the cost of training and increase the pass rate of students by incorporating gaming into the curriculum. Due to the advancement of computer processing power and graphics technology, immersive commercially viable off-the-shelf 3D game engines are readily available. Additionally, this style of learning also lends itself to the next generation workforce, and as such GSE is investing significantly in 3D visualization training products. Through development efforts already undertaken, GSE's engineers have discovered how to link our industry-leading, high fidelity models to commercially off-the-shelf game engines. This enables us to make the invisible visible, for example seeing the inside of an operating reactor, steam generator, or turbine generator. Blending the learning strategy by incorporating 3D visualization interfacing high fidelity real time simulation models will allow GSE to provide the energy industry with better, faster, less costly training ideally suited for the next generation workforce, which we have branded as Activ3Di™. In September 2012, the Company introduced the Virtual Flow Loop TrainerTM. It can cost approximately $1.0 million to construct a brick and mortar flow loop facility for training plant operating and maintenance staff. The Virtual Flow Loop Trainer is a practical and cost-effective alternative that operates on personal computers across a company's existing IT infrastructure. The Virtual Flow Loop Trainer provides the same level of training in a convenient, flexible environment. The Virtual Flow Loop Trainer is applicable across all industries and learning organizations that need to train their staff and students on both the fundamental and practical operations of a wide variety of pumps, valves, controllers, and instrumentation. We received our first 3D visualization orders in 2011 and recognized modest revenue from 3D visualization training products in 2012.

EDF Energy has agreed to a new collaboration with GSE which will see GSE's showcase state-of-the-art technology in EDF Energy's new flagship training facility at Cannington Court in the south west of England, as well as across the UK. Alongside the latest in nuclear power station simulation – designed to train and prepare operations employees – GSE will also supply their Activ3Di™ visualization 3D technology to recreate plant environments to deliver virtual reality training on specific maintenance scenarios.

Our EnVision™ products are playing an increasingly important role in the Company's training products mix for the oil and gas industries. The interactive multi-media tutorials and simulation models primarily for the petrochemical and oil & gas refining industries provide a foundation in process fundamentals, as well as plant operations and interaction. The blended learning strategy emphasizes using the right training tools and technology at the right step on the learning ladder to gain optimal performance. GSE now has a tiered offering when it comes to simulation, as well as a large library of training content in multiple languages. As a product sale, the EnVision product line garners significantly higher profit margin than GSE's traditional customized simulator business. Therefore the Company continues to invest in product development, technical and sales resources. In addition to new hires, the Company has expanded its network of sales representatives in key geographies including the Middle East, Asia and South America. In 2012 GSE was able to attract a Tier 1 global refining client, making it the second such client using the EnVision products across its worldwide fleet of refineries. New products are being developed to address the growing needs in the oil and gas upstream market, servicing the oil and gas production and LNG segments.

Background.

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.

In December 1997, the Company acquired 100% of the outstanding common stock of J.L. Ryan, Inc. ("Ryan"), a provider of engineering modifications and upgrade services to the power plant simulation market. The combination of the Company's pre-existing technology with the technical staff of the acquired Ryan business positioned the Company to be more competitive for modifications and upgrade service projects within the nuclear simulation market.

In October 2002, GSE purchased the stock of ManTech Automation Systems (Beijing) Company Ltd, from ManTech International Corp. The Chinese company, which has fifteen employees, was renamed GSE Systems Engineering (Beijing) Company Ltd. This acquisition gave the Company a base in China to pursue and implement simulation projects in that emerging market.

In 2007, the Company formed a subsidiary, GSE Systems Ltd., in the United Kingdom. The British subsidiary was established to provide training solutions to the nuclear power industry.

On April 26, 2010, the Company completed the acquisition of TAS Holdings Ltd ("TAS"). TAS, located in Stockton-on-Tees in the United Kingdom, provides engineering consulting, specializing in electrical system design, instrumentation and controls engineering and automation engineering. The majority of TAS's customers reside in the petroleum refining, oil and gas, chemical and petrochemical industries On March 31, 2012, the Company combined its TAS operations with GSE Systems Ltd, its UK subsidiary.

On July 28, 2010, the Company received a formal business license from the Chinese government for the Chinese joint venture, GSE-UNIS Simulation Technology Co., Ltd. ("GSE-UNIS"), a limited liability company. GSE-UNIS is 51% owned by Beijing UNIS Investment Co., Ltd. ("UNIS") and 49% owned by GSE. The largest shareholder of UNIS is Tsinghua University, a prestigious technology university in China. Established in 1988, UNIS has been acting as an incubator company transferring new technologies from the University's research laboratory to the commercial sector. The origin of its simulation platform can be traced back to 1984, a national award-winning technology developed by Tsinghua University. Over the past 20 years, hundreds of simulators have been built based upon this technology for approximately 200 customers in the fossil fueled electric power industry, accounting for about 50% of the total Chinese fossil fueled power market. Its solid customer base and strong relationships with the academic and government sector will help GSE-UNIS service contracts in both the fossil fueled as well as nuclear power markets in the Chinese market.

On January 4, 2011, the Company completed the acquisition of EnVision Systems, Inc. ("EnVision"). EnVision, which has been renamed GSE EnVision LLC, provides interactive multi-media tutorials and simulation models, primarily to the petrochemical and oil & gas refining industries. EnVision is headquartered in Madison, NJ, has an Indian subsidiary based in Chennai, India, and was founded in 1991. EnVision's tutorials and simulation models serve the entry-level training market for the oil & gas refining and specialty chemicals industries. EnVision's products provide a foundation in process fundamentals and plant operations and interaction. EnVision has completed more than 750 installations in over 28 countries and its approximately 130 clients include Shell Oil Company, BP Products North America ("BP"), Total and Chevron.

Nuclear and Fossil Fuel Power Simulation.

Industry History

The real-time simulation industry grew from the need to train people on complex and potentially dangerous operations, without placing life or capital assets at risk. Real-time simulation has been used for the training of plant operators for the power industry, including both nuclear power plants and conventional fossil fuel power plants (i.e., coal, oil, and natural gas), since the early 1970s. Real-time simulation usage has traditionally centered on initial training of operators and follow-on training of operators in emergency conditions that can best be achieved through simulation replicating actual plant operations.

In the U.S. nuclear power industry, use of a simulator that accurately reflects the current actual plant design is mandated by the U.S. Nuclear Regulatory Commission ("NRC"). This mandate resulted from the investigation of the accident at the Three Mile Island nuclear plant in 1979, which was attributed, at least in part, to operator error. The NRC requires nuclear plant operators to earn their licenses through simulator testing. Each U.S. nuclear plant simulator must pass a certification program to ensure that the initial plant design and all subsequent changes made to the actual plant control room or plant operations are accurately reflected in the simulator. U.S. plant operating licenses are tied to simulator certification. Other countries throughout the world look to the NRC for guidance in establishing their local controls for nuclear plants.

Full scope power plant simulators are a physical representation of the entire plant control room. For older plants, the control panels are connected to an input/output (I/O) system, which converts analog electrical signals to digital signals understood by the simulation computer. For newer plants, the control rooms consist mainly of digital control systems and a series of computer screens used by the operator to control the plant. The simulation computer houses the mathematical models which simulate the physical performance of the power plant's systems such as the reactor core, steam boiler, cooling water, steam turbine, electrical generator, plant system controls and electrical distribution systems. Partial scope simulators can be viewed as a subset of a full scope simulator. Instead of simulating the entire performance of the power plant, a partial scope simulator might represent one or two critical systems such as the

steam turbine and/or electrical generator operation.

In the past, training simulators had to strike a delicate balance between providing an accurate engineering representation of the plant, while still operating in “real-time” in order to provide effective training. As computing power has increased, so too has the capacity of simulators to provide more accurate plant representations in real-time based upon simulation models developed from engineering design codes. The more sophisticated and accurate engineering codes allow customers to use the simulator to help validate plant design, control system strategies, control system displays, and develop plant operating procedures and training material.

Simulation also is used to validate proposed plant equipment changes and to confirm the results of such changes, prior to making the change in the plant, which can save time and money, as well as reduce the risk of unsafe designs, for the utility.

The importance of nuclear power to the U.S. energy supply is resulting in the extension of the useful lives of U.S. nuclear power plants. Any service life extension of a nuclear power plant is likely to require major upgrades to the plant's equipment and technology, including its simulator.

Fossil fuel plant simulators are not required by law or regulation, but are justified as a cost-effective approach to train operators on new digital control systems being implemented at many fossil fuel power plants. The size, complexity and price of a fossil plant simulator are much lower than for simulators used for nuclear plants. Fossil plant simulators have traditionally used lower fidelity (less sophisticated) mathematical models to provide an approximate representation of plant performance. The demand for highly accurate models did not exist in the early market for fossil simulators since the main use of the simulator was to train operators on the functionality of distributed control systems for plant start-up activities.

As control system vendors aggressively pursued the replacement of old style control systems and control rooms with modern digital control systems (“DCS”), the fossil simulation market also changed. Utility customers demanded simulators as part of the control system upgrades, and DCS vendors recognized the value in using simulators early in the design process. Control strategies and equipment set points are validated on the simulator prior to plant start up to ensure the control schemes work properly and the expected plant performance is achieved. Performing these tests on a high fidelity simulator saves days or weeks in the plant start up, thereby reducing cost and ensuring quicker revenue generation by the utility.

Industry Future

According to ExxonMobil’s 2012 The Outlook for Energy: A View to 2040, the global demand for energy is expected to rise by 30% by 2040 and by 60% in non-OECD countries. Electrical generation will account for 40% of global energy consumption.

Viewed as a clean, non-carbon producing source of energy, the public perception of nuclear power became more favorable over the past decade. The anticipated renaissance was slowed by the economic downturn in 2008, yet nuclear construction worldwide continued. The natural disasters that caused the destruction of the Fukushima Daiichi plant in Japan dominated the industry news in 2011. Industry reaction to the event was mixed. Germany decided to phase out of nuclear power by 2021. However other countries are continuing to build new nuclear reactors, including the U.S. In February 2012, the U.S. NRC issued the Combined Operating License for the Vogtle Units 3 & 4 AP1000 reactors for Southern Company. The Company is building the simulators for those reactors through Westinghouse Electric Company LLC (“Westinghouse”).

The NRC is evaluating what direction to give the industry as a result of the events at Fukushima. The Company anticipates the need for U.S. utilities to extend the capabilities of their simulators to simulate long lasting events with serious electrical system issues, degradation of battery backup systems and other equipment problems. In addition, the Company anticipates the need for real-time simulation of core damage resulting from the lack of available cooling capacity. Engineering codes used to calculate the safety margins of plants can be used to accurately simulate plant damage resulting from extensive reactor fuel damage. The Company has developed a method to implement these engineering codes in the real-time simulator environment to provide the most accurate simulation solution available on the market. PSA-HD™ is the Company's real-time solution for severe accident simulation. PSA-HD will enable utilities to better test, validate and train on Severe Accident Management Guidelines.

The Company sees the continued construction of new nuclear plants both domestically and internationally providing significant opportunities for expansion of the Company's business. Westinghouse and its consortium team member The Shaw Group are under contract to provide two Westinghouse AP1000™ nuclear power plants at the Vogtle site, located in Burke County, Georgia. The new units are expected to begin commercial operation in 2016 and 2017. In addition to the Vogtle plant, the Westinghouse consortium is constructing two AP1000 nuclear power plants at SCANA Corporation's V.C. Summer Nuclear Station in Jenkinsville, S.C.

Internationally, there are currently over 60 nuclear reactors under construction in 14 countries. Per the World Nuclear Association ("WNA"), China has 13 nuclear power reactors in commercial operation, and 27 under construction. China's aim is to have a six fold or more increase in nuclear capacity by 2020. In Russia, eight large reactors are under active construction, seven further reactors are then planned to replace some existing plants, and by 2016 ten new reactors should be operating. Further reactors are planned to add new capacity by 2020. New plants are on the drawing board or under construction in Argentina, Canada, Brazil, Bulgaria, Finland, France, Japan, India, Pakistan, Romania, Slovakia, South Korea, Taiwan, Ukraine and the United Arab Emirates. Other Middle East and Asia Pacific countries are actively evaluating the potential for nuclear power.

The U.S. Department of Energy believes that there is a need and a market in the U.S. for Small Modular Reactors ("SMRs"), and started a program in 2011 to advance the licensing and commercialization of SMR designs. The anticipated benefits of these designs are lower capital costs, faster construction, scalable power production and enhanced safety. Two of the primary SMR designers are using the Company's simulation technology and engineering expertise to help in the early design phase of these plants.

Beyond new construction, numerous U.S. and international utilities are extending the useful life of their current assets. These license extension processes in the nuclear industry will result in significant changes in plant equipment and control room technology. Based upon U.S. NRC regulations, each training simulator is required to reflect all changes that are made in the actual plant, thus when changes in plant equipment and control room technology are made, the nuclear power plants must either upgrade existing simulators or purchase brand new simulators. In January 2010, The Shaw Group, a major nuclear engineering and construction company, estimated that up to 67 reactors in the future could be up-rated to produce more power, creating a $25 billion market for plant modifications in the U.S. alone.

Another phenomena affecting the industry is the aging of the nuclear and fossil plant operator workforce which will result in the need for simulation to train the next generation of plant operators. According to the Center for Energy Workforce Development, an estimated 46% of the current energy industry workforce may need to be replaced by 2015 due to attrition and retirement. Thus, the industry is faced with an aging workforce at the same time new capacity is needed, thereby placing significant pressure on the industry to find and train the next generation of operations and maintenance personnel. In their employment outlook for the utilities industry, the Bureau of Labor Statistics states "Because on-the-job training is very intensive in many utilities industry occupations, preparing a new workforce will be one of the industry's highest priorities during the next decade".

Therefore, the Company believes that these trends, if they come to fruition in whole or even in part, represent a market opportunity for its real-time simulation, education, training, and engineering services for new plants and next generation learning products and services.

GSE's Solutions

The Company's Power Simulation business is a leader in the development, marketing and support of high fidelity, real-time, dynamic simulation software for the electric utility industry. The Company continues to invest in the development of sophisticated simulation solutions to address emerging technical and training needs of the industry. These developments focus on more advanced modeling of reactor and electrical system phenomena, as well as applications that support automated testing and lifecycle management of plant and simulator data.

The sophistication of the Company's proprietary simulation technology enables the Company to serve not only the operator training market, but to support the engineering and plant design market. The Company's technology is used for multiple purposes in plant design, including creation of the initial plant logic and control design prior to implementation by the DCS (distributed control systems) company; as a test bed for equipment sizing assumptions, and to test the efficacy of the human factors design of the control room screens.

The Company has also developed integrated training solutions which combine the power of the Company's simulation technology with training content to provide turn-key training for the power and process industries. These training programs will help industry bridge the gap between university level training and real world experience through simulation. Recognizing the workforce development challenges facing the power industry, the Company has invested in new learning platforms based upon 3D visualization and serious gaming technology. This technology has numerous applications from visualizing the complex phenomena inside a nuclear reactor to capturing the experience of a subject matter expert in how to maintain key plant equipment. This technology is also focused at a new generation of power plant workers that learn differently and expect a more interactive and technology based delivery system. The result is the Company's Active 3Di learning environment.

In addition to operator training, the Company's simulation products and services permit plant owners and operators to simulate the effects of changes in plant configuration and performance conditions to optimize plant operation. These features allow the Company's customers to understand the cost implications of replacing a piece of equipment, installing new technology or holding out-of-service assets. GSE has also developed a suite of tools based on sophisticated signal analysis and simulation techniques to help its customers manage their assets by determining equipment degradation before it severely impacts plant performance.

GSE provides both turn-key solutions, including simulated hardware and proprietary software, to match a specific plant, and discrete simulation technology for specific uses throughout a plant. Its substantial investment in simulation technology has led to the development of proprietary software tools. These tools significantly reduce the cost and time to implement simulation solutions and support long-term maintenance. The Company's high fidelity, real-time simulation technology for power plant fluid, logic and control, electrical systems and associated real-time support software, JADE, is available for use primarily on UNIX, Linux and Windows computer platforms. The Company's

Xtreme tools were designed for the Windows environment. Both technologies were specifically designed to provide user friendly graphic interfaces to the Company's high fidelity simulator.

Our Power Simulation products include:

- Java Applications & Development Environment (JADE™), a Java-based application that provides a window into the simulation instructor station and takes advantage of the web capabilities of Java, allowing customers to access the simulator and run simulation scenarios from anywhere they have access to the web. JADE includes the following software modeling tools:
  - JFlow™, a modeling tool that generates dynamic models for flow and pressure networks.
  - JControl™, a modeling tool that generates control logic models from logic diagrams.
  - JLogic™, a modeling tool that generates control logic models from schematic diagrams.
  - JElectric™, a modeling tool that generates electric system models from schematic and one-line diagrams.
  - JTopmeret®, a modeling tool that generates two phase network dynamic models.
  - JDesigner™, a JADE based intuitive graphic editor for all JADE tools.
  - JStation™, a JADE based web-enabled Instructor Station.

- Xtreme Tools™, a suite of software modeling tools developed under the Microsoft Windows environment. It includes:
  - Xtreme Flow™, a modeling tool that generates dynamic models for flow and pressure networks.
  - Xtreme Control™, a modeling tool that generates control logic models from logic diagrams.
  - Xtreme Logic™, a modeling tool that generates control logic models from schematic diagrams.
- Xtreme Electric™, a modeling tool that generates electric system models from schematic and one-line diagrams.

- GPWRTM, a generic pressurized water reactor full scope simulator, combining GSE's high fidelity models with a graphical representation of the control panels to provide everything from fundamentals training to systems training for plant operators. The GPWR can be run on GSE's VPanel display system or standard PCs.

- RELAP5-HD®, a real-time version of the safety analysis code RELAP5 developed by the Idaho National Laboratory. The Company's High Definition version of RELAP5 R/T enables the engineers to understand and control all of the internal functions of RELAP5, making this solution unique in the market.

- PSA-HDTM, a real-time environment for running the Electric Power Research Institute's (EPRI) MAAP 5.0 severe accident analysis code. The MAAP 5.0 code is used by safety analysis engineers to estimate the effects of core damage in beyond design basis scenarios. PSA-HD provides an integrated simulator environment that gives engineers and operators a view of the entire plant response to severe accident events and allows for validation of the plant's Severe Accident Management Guidelines.

- SimExec® and OpenSim™, real-time simulation executive systems that control all real-time simulation activities and allow for an off-line software development environment in parallel with the training environment. OpenSim is targeted for users of Microsoft Windows operating systems, while SimExec is targeted for users of Microsoft Windows, UNIX and Linux operating systems.

- SmartTutor™, complementary software for instructor stations. It provides new capabilities to help improve training methodologies and productivity. Using Microsoft Smart Tag technology, SmartTutor allows the control of the simulator software directly from Microsoft Office products. The user can run training scenarios directly from a Microsoft Word document, or he can plot and show transients live within a Microsoft PowerPoint slide.

    - SmartToolsTM, are a suite of tools that assist the simulator maintenance staff in automatically testing and documenting the performance of the simulator against baseline data to ensure the simulator continues to perform correctly. The tools were specifically designed to support the Scenario Based Testing requirements of the ANSI/ANS 3.5 2009 standard being adopted by the nuclear industry.

- Xtreme I/S™, a Microsoft Windows based Instructor Station that allows the use of Microsoft Word and PowerPoint to control the real-time simulation environment. Xtreme I/S is a user-friendly tool for classroom training and electronic report generation. It provides real-time plant performance directly from the simulator during classroom training, which drastically increases learning efficiency.

- Pegasus Surveillance and Diagnosis System™, a software package for semi-automatic plant surveillance and diagnostics, incorporates sophisticated signal processing and simulation techniques to help operators evaluate the condition and performance of plant components. Pegasus permits plant management to identify degraded performance and replace components before they fail.

- SIMON™, a computer workstation system used for monitoring stability of boiling water reactor plants. SIMON assists the operator in determining potential instability events, enabling corrective action to be taken to prevent unnecessary plant shutdowns.

- VPanel™, an interactive visual training solution. For customers that already have a full scope ANS 3.5 Certified simulator, the VPanel provides a second hardware platform that will run the ASN 3.5 Simulator software model at a fraction of the cost of building a second full scope simulator. The VPanel Simulator provides the same fidelity of operation as their existing simulator but the VPanel offers portability and versatility at a very affordable price. All of the features and functions of the full scope ANS 3.5 Simulator are duplicated in the VPanel simulator but the VPanel can be used in a classroom setting or as a second simulator to alleviate many of the time pressures our customers are experiencing with their current simulators. For nations considering entry into the nuclear power industry the VPanel is the ideal tool to help build a base of experienced nuclear workers either at a university or industrial training facility. Since the VPanel uses a software load from an ANS 3.5 Certified simulator it will accurately reflect the operations and response of an operating nuclear power plant. The VPanel provides nations entering the nuclear power industry with realistic hands on experience of the operation of a nuclear facility long before they begin construction on their facilities.

The Power Simulation business also provides consulting and engineering services to help users plan, design, implement, and manage/support simulation and control systems. Services include application engineering, project management, training, site services, maintenance contracts and repairs.

Strategy

The goal of the Power Simulation business is to service the needs of the industry at the intersection of a growing global demand for energy and reduction in qualified energy operations professionals. This will take place on three fronts:

- Continue serving its traditional customer base, building new full scope simulators for newly constructed plants, and upgrading technology and services within the installed base.

- Combine its simulation capability with training content and new visualization technology to provide totally integrated training solutions for the new workforce.

- Expand the use of high fidelity simulation beyond training to help with plant design, control system design and verification, and control room human factors design.

Traditional Simulation Market. Nuclear power currently accounts for about 20% of the total electrical output in the United States and this percentage will likely remain the same even as total capacity increases. Any new nuclear power plants with electric output greater than 1,000 megawatts will likely be of the advanced reactor designs created by Westinghouse, General Electric and Areva. These new designs require new simulators and training programs, as they are different from the nuclear power plant designs currently in operation. Additionally, the market for Small Modular Reactors, for plants producing 45 megawatts – 200 megawatts will require new simulators and training programs for the same reasons. In addition to new power plants, existing nuclear power plants will likely be required to remain on-line for a longer period than originally expected. In order to stay in operation, many plants will require life extension modifications. Since nearly all existing U.S. nuclear power plants went on-line before 1979, their designs and technology can also benefit from the substantial advances in plant design and technology developed over the past 30 years. For example, several of the Company's U.S. utility customers have been replacing their existing hard panel control rooms with modern DCS as are common in fossil fuel plants and which have been implemented in Europe for several years. Significant changes to control room instrumentation and overall control strategy from hard panel to DCS generally require modification or replacement of the plant simulator. With the largest installed base of nuclear plant simulators in the world, the Company believes it is uniquely positioned to serve this market segment with new simulation products and services. GSE has received several projects in the last few years for implementing digital turbine control systems in U.S. plants.

As plants extend their useful life, many plan to "up-rate" the existing capacity to increase electrical yield. By changing the capacity of certain equipment in a plant, the utility can gain upwards of a 10%-15% increase in output. Again, any such changes must be reflected in the control room simulator, and operators must be trained on the new equipment before implementation.

In addition to the United States markets, several emerging regions of the world are expanding their electrical capacity with both nuclear and fossil fuel power plants. This is particularly the case in China and India.

Education and Training. One of the most effective ways for adults to learn and retain knowledge is through experiential learning, or learning by doing. The Company continues to develop simulation products and learning materials that tightly couple experiencing plant operations through the use of a simulator, in a variety of learning environments. For example, increased training requirements and demands for performance improvement have resulted in simulator training time becoming scarce. By providing the actual training simulator models in a classroom setting, through VPanel solutions, the value of the simulator is increased by allowing more personnel the training advantages of interactive, dynamic real-time simulation. Traditionally the plant control room simulator asset was primarily used by the plant operating staff. These portable simulation devices are being used by non-traditional simulator users to become familiar with plant operations, practice scenarios prior to implementation in the plant, and

for other system familiarization and studies by various departments throughout the utility.

Beyond traditional simulator applications are the Company's Activ3Di 3D products which merge high fidelity simulation with serious gaming and visualization. The benefits of this combined approach are:

- Allows for situated learning
- Combines high engagement and powerful content
- Triggers profound reflections
- Permits a rapid understanding of complex environments
- Shows how actions affect context
- Avoids repetitiveness and boredom associated with traditional learning methods

Engineering Simulation. The resurgence of the nuclear industry has produced many new nuclear designs, resulting in more intelligent control rooms and more complex digital control and safety systems. In addition to new nuclear "First-of-a-Kind" (FOAK) plant design, new types of energy plants such as Integrated Gasification Combined Cycle plants integrate chemical and power generation technologies through a variety of control platforms. A real-time, dynamic simulator supports the design of the plant in a way that was not available for the previous generation of plant design.

The simulator becomes a tool to: (1) reduce project risk during the design process, (2) provide an invaluable platform for demonstrating the new design to regulators, customers and stakeholders, and (3) train operators for licensing prior to plant commissioning.

Building a simulator when the design is not complete presents significant challenges. The Company is able to accomplish the task because its staff of senior engineers have modeled up to 8 to 10 different power plants in both nuclear and non-nuclear power generation. This gives the Company the ability to create workable interim solutions until the plant design is finalized. The key to the Company's success with this is its large engineering team experienced in nuclear power plant design and operation. Also, the high fidelity modeling products which are necessary to make possible the development of accurate models based on design data gives the plant designer the confidence that the simulator truly represents the performance of the future plant.

Optimize Existing Engineering Resources. GSE's Power domestic service organization focuses on simulator upgrades and retrofits. In addition to domestic resources, GSE has developed a network of trained engineers in Russia, Ukraine, Czech Republic, Bulgaria, and China. These foreign resources provide low cost engineering and software development capabilities and are readily available to supplement the United States engineering staff as necessary.

Strategic Alliances

GSE's strategic alliances have enabled the Company to penetrate regions outside the United States by combining the Company's technological expertise with the regional presence and knowledge of local market participants. These strategic alliances have also permitted the reduction of research and development and marketing costs by sharing such costs with other companies.

In recent years, a significant amount of the Company's international business has come from contracts in Eastern Europe, including the republics of the former Soviet Union, and the Pacific Rim. In order to acquire and perform these contracts, the Company entered into strategic alliances with various entities including: All Russian Research Institute for Nuclear Power Plant Operation (Russia); Kurchatov Institute (Russia); Risk Engineering Ltd. (Bulgaria); Samsung Electronics (Korea); Toyo Engineering Corporation (Japan); UNIS (China) and Westinghouse Electric Company LLC (U.S.).

Competition

The Power Simulation business encounters intense competition. In the nuclear simulation market, GSE competes directly with larger firms primarily from Canada and France, such as L-3 MAPPS Inc., a subsidiary of L-3 Communications, CORYS T.E.S.S and Western Services Corp. In the fossil simulation market, the Company competes with numerous smaller companies in the U.S. and overseas. Several of the Company's competitors have greater capital and other resources than it has, including, among other advantages, more personnel and greater marketing, financial, technical and research and development capabilities. Customer purchasing decisions are generally based upon price, the quality of the technology, experience in related projects, and the financial stability of the supplier.

Customers

For more than 40 years, the Company has been developing next-generation, custom training simulation technologies. Since we built the first commercial full-scope nuclear power plant simulator in 1971, the Company has 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 2012, approximately 70% of the Company's revenue was generated from end users outside the United States. Customers include, among others, ABB Inc., American Electric Power, Bernische Kraftwerke AG (Switzerland), British Energy Generation Ltd. (UK), Comisión Federal de Electricidad (Mexico), Concern Titan-2 (Russia), Emerson Process Management, Georgia Power, Kärnkraftsäkerhet och Utbildning AB (Sweden), Kraftwerks–Simulator-Gesellschaft mbH (Germany), Nuclear Engineering Ltd. (Japan), PSEG Nuclear, Inc., Slovenské elektrárne, a.s. (Slovakia), and Westinghouse Electric Co.

The following Power Simulation customers have provided more than 10% of the Company's consolidated revenue for the indicated periods:

	Years ended December 31,		
	2012	2011	2010
Slovenské elektrárne, a.s.	6.5%	10.0%	22.1%
Emerson Process Management	4.7%	6.8%	11.1%

Sales and Marketing

The Company markets its Power Simulation products and services through a network of direct sales staff, agents and representatives, systems integrators and strategic alliance partners. Market-oriented business and customer development teams define and implement specific campaigns to pursue opportunities in the power marketplace.

In 2012 the Company launched an expanded marketing program. Primary and secondary market research was conducted to determine key buying decisions of the Company's customers across the nuclear and thermal power generation markets as well as the process industries. The result was a clearer understanding of the Company's unique value in industry specialists, bandwidth of technical resources and technological offerings. The secondary research

pointed out the need to promote the Company’s broad range of solutions across all segments of the energy industry to deal with engineering, simulation and training needs.

The result of the research was the development of a new brand statement that builds from a solid history of industry-leading high-fidelity experience and tangible simulation results. The Company can help customers achieve, design, train and operate with performance excellence using the next level turnkey and modular solutions for training, simulation and engineering.

In addition to the brand statement, the Company updated its corporate logo, tagline, and website to better reflect its brand promise.

The Company has also launched a proactive public relations program, issuing more non-financial press releases aimed at product development and delivery, as well as the Company's role in numerous industry trade shows and technical conferences. A social media communications plan has been launched to build a stronger presence across all media as they play a critical role in marketing communications, and reflect how the customer base finds information about the company.

The Company's ability to support its multi-facility, international and/or multinational Power Simulation clients is facilitated by its network of offices and strategic partners in the U.S. and overseas. Power Simulation offices are maintained in Maryland and Georgia, and outside the U.S., in Sweden, China and the United Kingdom. In addition to the offices located overseas, the Company's ability to conduct international business is enhanced by its multilingual and multicultural work force. GSE has strategic relationships with systems integrators and agents representing its interests in the Czech Republic, Bulgaria, Japan, Mexico, People's Republic of China, South Africa, South Korea, Taiwan, Ukraine and the United Kingdom.

II. Process Industries.

Industry

Throughout the process industries there is continuing competitive pressure, reduction of technical resources, and an aging workforce which is forcing process manufacturers to turn to advanced technologies for real-time optimization, training, and advanced process control. Operational efficiency is vital for companies to remain competitive where many of the manufacturing industries operate on very thin margins. In addition, the process industries are facing increasing safety standards via legislation and national and international standards and codes of practice. The Gulf of Mexico oil spill disaster in 2010 raised the public's awareness of the financial, environmental and safety issues associated with human operating errors and this has added pressure to the process industries to ensure that their operators are fully trained and that safety issues are addressed.

The Future

The process industries such as oil refining, and specialty chemicals have long relied on steady state simulation for plant design and optimization. The trend going forward is to leverage the investment in steady-state models into a dynamic simulation environment that can be used both in the design process and for operator training. The industry phrase is multipurpose dynamic simulation. Equally important are the same labor issues that are facing other sectors of the energy industry and manufacturing in general, and that is the aging workforce. Compounding the problem for the process industries versus the nuclear industry is the lack of regulation surrounding operator qualifications and training.

The Company sees the same opportunity to provide integrated simulation and training solutions to the process industries as it does for the power generation industry. In addition to plant operating personnel the supporting engineering and control system suppliers face the same challenges as subject matter experts retire and the next generation of workers has little practical experience to go along with their formal education.

Industry investment in the oil and gas sector is shifting towards the upstream segment of the industry. This includes gas oil separation, shipment and storage, liquefied natural gas process and gas to liquids. According to the IBISWorld, The Global Oil and Gas Exploration and Production Market Research Report, the upstream industry generated revenue of $4.37 trillion in 2012. This is up from $3.03 trillion in 2007, yielding annualized growth of 7.5%. Revenue expanded 11.7% in 2012, building on extremely large gains over the past two years, when prices surged.

GSE's Solutions

The acquisitions of TAS Engineering Consultants Ltd. ("TAS) and EnVision Systems, Inc. ("EnVision"), combined with the Company's traditional simulation capabilities, enables the Company to offer a full spectrum of training, simulation and engineering solutions. GSE offers interactive multimedia tutorials and simulation models for teaching the fundamentals of various refinery and petrochemical plant operations, dynamic real-time simulation capabilities for process operator training and plant design validation and verification, and consultancy services for engineering design and safety regulations compliance.

With the acquisition of EnVision on January 4, 2011 (subsequently renamed GSE EnVision LLC), GSE now offers a full range of training products for the oil & gas, refining, petrochemical and specialty chemicals industry. The EnVision suite of products provides Computer Based Tutorials and Process Specific Simulation Models to provide a sound fundamental knowledge of key processes and equipment. These products support both self-paced and instructor led learning environments. Each product fits a specific purpose and phase of the training cycle.

In 2012, EnVision landed a global contract with BP Products North America to provide a wide variety of computer based tutorials and generic simulation models to assist in the core fundamental operations training for control room operators, instrumentation and maintenance technicians and process engineers in nine of BP's Refinery and Ethylene plants. The total value of this multi-year contract is $3.64 million.

To address the custom operator training simulator market, GSE provides JPro™ which consists of an integrated software suite that can build, test and run simulation models, dynamically and in real time. These models are used for process and control system design, process scale up and evaluation, engineering study, advanced process control and operator training. The models can be used alone or connected to virtually any control system. JPro provides an easier to use interface to the same highly sophisticated model building environment of SimSuite Pro™. JPro uses the same interface as GSE's JADE tool suite, thereby making it easier for customers of integrated gasification and combined cycle and other plants that require a combination of chemical plant and power plant modeling capabilities.

In 2012, the Company combined its TAS operations with GSE Systems Ltd, its UK subsiderary to leverage the worldwide product offering of GSE. GSE UK is a UK supplier of engineering consultancy services which satisfy many of the needs of high availability, high hazard industries typified by a requirement to register under Control of Major Hazard Accident (COMAH) legislation in the United Kingdom. GSE UK's key engineering consultancy offerings include:

- Arc flash hazard studies,
- Electrical safety management,
- Functional safety (IEC 61508) support,
- Potentially explosive atmosphere support,
- Alarm management, and
- Preventative maintenance procedures incorporating human factors.

Building on client relationships developed in the provision of specialist consultancy, GSE UK seeks to develop long term relationships based on support in electrical, instrumentation, control and automation projects, electrical switchgear replacement and new automation systems.

In 2012, GSE UK delivered Arc Flash studies across 23 sites in Europe, the Middle East and Africa to a global tooling, engineered components and advanced materials supplier. The Company expects to undertake studies for the same organization in 2013 across their Asian facilities and is developing relationships with other major companies for similar services.

The GSE culture and expertise is one of customized project execution and delivery. This marketplace places a high value on experience, both company-wide and for the individuals on the project teams, so GSE promotes its long history in training simulators, while also seeking new applications.

To address the upstream market potential, the Company is developing simulation and computer based tutorial solutions for the most common gas oil separation process used by most oil and gas producers. These standard products will be part of the Company’s EnVision product line and will be released for sale in the second half of 2013.

Strategy

GSE is uniquely positioned in the process simulation market to provide the full continuum of training solutions which combine computer base learning, generic and plant specific simulators with the training infrastructure and course material to enable the customer to truly benefit from the simulator investment. The core concepts of process simulation make the technology a basis for other potential process improvement activities, such as Advanced Process Control and Process Optimization, which is where some of the major GSE competition has more business focus than for operator training. GSE will continue to emphasize its operator training focus and strengths, as well as the application of the process simulator for change management, where changes in the process, control strategy, or operating procedures can be evaluated in real time before they are applied to the actual process units. On-stream time is an important economic factor, and there is recognizable value in avoiding the risk of unplanned process disturbances from invalidated changes.

The Company will continue to pursue solutions for emerging market segments such as Fracking, Liquefied Natural Gas (LNG) and Integrated Gasification Combined Cycle ("IGCC") power plants. These new plants produce electricity more efficiently than traditional power plants by first converting existing refinery waste materials into synthetic gas that is used to power a gas turbine. The gas is then burned to create steam to turn a steam turbine. The unique nature of these plants requires expertise both in chemical process simulation and power simulation. GSE is one of the few simulator companies in the world with expertise in both areas.

Customers

Hydrocarbon and chemical process customers include numerous large oil refineries and chemical plants such as BP (Germany), Statoil ASA (Norway), Bayernoil (Germany), Chevron, Emerson Process Management, Saudi Basic Industries Corporation (Saudi Arabia), Shell Oil, Savannah River Nuclear Solutions, LLC, Total (Belgium), and Bechtel Hanford National Laboratory.

Competition

GSE's process simulation competitors are a varied group. There are major corporations offering a wide range of products and services that include operator training simulators. There are also companies focused on process technology and manufacturing enhancement, such as Invensys and Honeywell who are DCS distributors to the refining industry and provide operator simulation as part of their DCS offering. There is a collection of companies with specific industry niches that enables them to compete in operator training simulation, such as Kongsberg and RSI Simcon. There are also the smaller training companies that compete at the lower cost levels of Computer Based Training ("CBT") or simple simulations close to CBT such as Simtronics.

The GSE focus on dynamic simulation for training and design validation is a business strength, and its vendor independence, with the ability to integrate to different vendor's process control systems, is also a value which is appreciated by customers. GSE can be seen as a best-of-breed type of supplier because it is not tied to a major control system, nor is it providing simulation software for engineering and business management with high annual license fees.

Sales and Marketing

The Company will market its Process Simulation technologies through a combination of techniques including its existing direct sales channel, sales agents, and strategic alliance partners. Sales representatives and partners are located in Azerbaijan, Bulgaria, China, Egypt, Mexico, Qatar, Saudi Arabia, Malaysia, Romania, Singapore, Thailand, UAE, and Vietnam. Relationships developed with typical power plant DCS companies are now expanding to process plant applications as the DCS companies target an increase in market share in the process industries. In addition, the acquisition of EnVision Systems provides access to a large installed base of computer based learning customers that may require more plant specific simulator solutions.

Competitive Advantages.

The Company believes that it is in a strong position to compete in the Simulation markets based upon the following strengths:

- 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 246 employees, including approximately 184 engineers and scientists. Of the 184 engineers, approximately 46% of these engineers and scientists have advanced science and technical degrees in fields such as chemical, mechanical and electrical engineering, applied mathematics and computer sciences, while an additional 33% have master degrees, and another 11% have doctorate degrees in the aforementioned fields.

- 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 has a substantial library of Process Specific Simulation models and Computer Based Learning Modules aimed at the oil and gas, refining and specialty chemicals market.

- Open System Architecture. GSE's software products and tools are executed on standard operating systems with third-party off-the-shelf hardware. The hardware and operating system independence of its software enhances the value of its products by permitting customers to acquire less expensive hardware and operating systems. The Company's products work in the increasingly popular Microsoft operating environment, allowing full utilization and integration of numerous off-the-shelf products for improved performance.

- Training Curricula. The Company has developed hundreds of detailed courses and simulator exercise material or specific industrial applications including oil and gas refining, gas-oil production and separation and desalination.

- International Strengths. Approximately 70% of the Company's 2012 revenue was derived from international sales of its products and services. GSE has a multinational sales force with offices located in Beijing, China, Nyköping, Sweden, Stockton-on-Tees, UK, Chennai, India and agents, representatives and partners in 20 other countries. To capitalize on international opportunities and penetrate foreign markets, the Company has established strategic alliances and partnerships with several foreign entities and universities.

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 seven registered U.S. trademarks: GSE Systems®, JTOPMERET®, Openexec®, RELAP5-HD®, REMITS-Real-Time Emergency Management Interactive Training System®, RETACT®, and SimExec®. Some of these trademarks have also been registered in foreign countries. The Company also claims trademark rights to BRUS™, ESmart™, GAARDS™, GCONTROL+™, GFLOW+™, GLOGIC+™, GPower+™, ISIS™, Java Application and Deve Environment (JADE)™, OpenSim™, PEGASUS Plant Surveillance and Diagnosis System™, PSA-HD™, RACS™, Sens B SIMON™, SimSuite Power™, SimSuite Pro™, SmartTutor™, THOR™, VPanel ™, Vista PIN™, 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 2012, 2011, and 2010 consolidated revenue by industries served:

	2012	2011	2010
Nuclear power industry	59%	67%	72%
Fossil fuel power industry	19%	16%	18%
Process industry	19%	15%	8%
Training and education industry	3%	2%	2%
Total	100%	100%	100%

Contract Backlog.

The Company does not reflect an order in backlog until it has received a contract that specifies the terms and milestone delivery dates or other payment terms. As of December 31, 2012, the Company's aggregate contract backlog totaled approximately $51.9 million of which approximately $36.2 million or 69.7% is expected to be converted to revenue by December 31, 2013. As of December 31, 2011, the Company's aggregate contract backlog totaled approximately $51.5 million.

Employees.

As of December 31, 2012, the Company had 246 employees as compared to 262 employees at December 31, 2011.

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 additional risks and uncertainties actually occur, 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.

In 2012, 59% of GSE's revenue was from customers in the nuclear power industry (67% in 2011 and 72% in 2010). The Company expects to derive a significant portion of its revenue from customers in the nuclear power industry for the foreseeable future. The Company's 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.

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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 70% of the Company's consolidated revenue in 2012, 66% of consolidated revenue in 2011, and 71% of consolidated revenue in 2010. Consequently, our businesses are subject to a variety of risks that are specific to international operations, including the following:

- export regulations that could erode profit margins or restrict exports;
- compliance with the U.S. Foreign Corrupt Practices Act and similar non-U.S. regulations;
- the burden and cost of compliance with foreign laws, treaties and technical standards and changes in those regulations;
- contract award and funding delays;
- potential restrictions on transfers of funds;
- potential difficulties in accounts receivable collection;
- currency fluctuations;
- import and export duties and value added taxes;
- transportation 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 countries have provided more than 10% of our consolidated revenue for the indicated period:

	Year Ended December 31,		
	2012	2011	2010
United Kingdom	16%	12%	5%
People's Republic of China	11%	5%	4%
Japan	9%	13%	9%
Federal Republic of Germany	8%	12%	9%
Slovak Republic	6%	10%	22%

Our expense levels are based upon our expectations as to future revenue, so 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 $52.2 million, $51.1 million, and $47.2 million for the years ended December 31, 2012, 2011, and 2010, respectively. Our operating income (loss) was $2.0 million, $2.2 million, and $(1.2) million for the years ended December 31, 2012, 2011, and 2010, 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 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 to purchase from us. Our backlog as of December 31, 2012 and 2011 was $51.9 million and $51.5 million, respectively. Our backlog is subject to fluctuations and is 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, future revenues. Our failure to replace canceled or reduced backlog would have an adverse effect on our operating results.

We are a party to fixed price contracts and will enter into similar contracts in the future, which could result in reduced profits or losses if we are not able to accurately estimate or control costs.

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, or if unanticipated circumstances arise, we could experience cost overruns which would result in reduced profits or even result in 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 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.

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

We are dependent on product innovation and research and development, which costs are incurred prior to 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. 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 use derivative instruments in the normal course of our business which could result in financial losses that negatively impact our net income.

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 counterparty fails to perform. We attempt to minimize credit exposure by limiting counterparties to internationally recognized financial institutions.

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

We are often required to issue performance bonds to our 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, 2012, we had issued bid and performance bonds on fifteen contracts totaling $6.0 million, of which $1.8 million have been cash collateralized; the largest of these performance bonds was for $2.5 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 $6.0 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 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.

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 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/or 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.

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;
- 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. We may make a strategic acquisition knowing that the transaction may adversely affect our short-term profitability, perhaps because the acquisition candidate may be experiencing operating losses. We may believe that acquiring such a company outweighs the operating losses the candidate is experiencing and the losses that we expect to experience before being able to make the acquisition candidate profitable. The completion of such an acquisition in the future would negatively affect our profitability and may cause a decline in our stock price. While we believe we have established appropriate and adequate procedures and processes to mitigate the risks of such an acquisition, there is no assurance that the transaction will be successful and not have a negative effect on profitability.

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. 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. Although we currently experience relatively low rates of turnover for our technical personnel, the rate of turnover may increase in the future. 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.

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

Global cybersecurity 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), cybersecurity 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 cybersecurity incident include reputational damage, litigation with third parties, diminution in the value of our investment in research, development and engineering, and increased cybersecurity protection and remediation costs, which in turn could adversely affect our competitiveness and results of operations.

Third-party claims that we 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. 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 occurred, 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 from, liability that may be imposed under any of the types of claims described above.

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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 of the Company.

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. 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.

A sustained decline in the price of our common stock or weaker than forecasted operating results could result in an impairment of our goodwill.

In conjunction with business acquisitions, we record goodwill at fair value and review its fair value for impairment annually as of November 30, or on an interim basis if impairment indicators are present, such as a significant reduction in the Company's market capitalization, significant declines in operating performance or disruptions to the business that could reduce the Company's future cash flow. A quantitative assessment of goodwill was performed as of November 30, 2012 using several market-based valuation approaches as well as utilizing an income-based approach that discounts future cash flows of the Company. Based on the results of our assessment, we determined that there was no impairment of our goodwill at November 30, 2012. However, 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 Statement for information regarding our goodwill.

We have identified, and may identify in the future, a material weakness in our internal control over financial reporting, which may require us to divert management resources to remediate this material weakness.

We have identified a material weakness in our internal control over financial reporting as of December 31, 2012. In late 2012, the Company implemented a new system for financial reporting and accumulation of financial data. The new financial system is a significant component of the Company's internal control over financial reporting, but was not adopted in response to any deficiency in our internal controls. As of December 31, 2012, we had not completed the evaluation of the completeness, design and operating effectiveness of the internal controls over the new financial system. As a result of this material weakness in our internal control over financial reporting, we performed additional review and analysis over our consolidated financial statements for the year ended December 31, 2012. As a result of these procedures, we believe that our consolidated financial statements are presented in accordance with U.S. GAAP. We are currently in the process of completing our evaluation of the completeness, design and operating effectiveness of the new financial system.

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The effectiveness of any system of internal control over financial reporting is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating and evaluating the controls and procedures. Because of these inherent limitations, internal control over financial reporting cannot provide absolute assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with GAAP and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that internal controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

It is possible that additional control deficiencies may be identified in addition to, or that are unrelated to, the material weakness described above in future periods. Such material control weaknesses could, among other things, cause us to fail to identify and correct material misstatements in our financial reporting, prevent us from filing our periodic reports with the SEC on a timely basis which could have a material adverse effect on our ability to access capital markets, or prevent us from avoiding or detecting fraud. It is possible that we would need to incur additional costs and/or divert management resources to correct such material control weaknesses.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

The Company is headquartered in a facility in Sykesville, Maryland (approximately 40,000 square feet). The lease for this facility expires on June 30, 2018.

In addition, the Company leases office space domestically in St. Marys, Georgia, Madison, New Jersey, Cary, North Carolina and Tarrytown, New York and internationally in Beijing, China, Chennai, India, Nyköping, Sweden and Stockton-on-Tees, England. The Company leases these facilities for terms ending between 2013 and 2018.

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:

2012

Quarter	High	Low
First	$ 2.43	$ 1.71
Second	$ 2.88	$ 2.07
Third	$ 2.38	$ 1.86
Fourth	$ 2.20	$ 1.76

2011

Quarter	High	Low
First	$ 3.85	$ 1.90
Second	$ 2.40	$ 2.13
Third	$ 2.36	$ 1.64
Fourth	$ 2.10	$ 1.54

The following table sets forth the equity compensation plan information for the year ended December 31, 2012:

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a) (c)
Equity compensation plans approved by security holders	3,070,803	$3.40	836,883
Equity compensation plans not approved by security holders	--	$ --	--
Total	3,070,803	$3.40	836,883

There were approximately 944 holders of record of the common stock as of December 31, 2012. 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.

Issuer Purchases of Equity Securities

On March 21, 2011, the Board of Directors authorized the purchase of up to $3.0 million of the Company's common stock in accordance with the safe harbor provisions of Rule 10b-18 of the Securities Exchange Act of 1934. During the year ended December 31, 2011, the Company repurchased 824,374 shares at an aggregate cost of $1.6 million. During the year ended December 31, 2012, the Company repurchased 280,113 shares at an aggregate cost of $531,000.

Month	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced program	Approximate dollar value of shares that may yet be purchased under the program
January 1 - January 31	68,684	$ 1.87	893,058	$ 1,222,521
February 1 - February 28	59,878	$ 1.89	952,936	$ 1,109,569
March 1 - March 31	33,825	$ 1.81	986,761	$ 1,048,231
April 1 - April 31	-	$ -	986,761	$ 1,048,231
May 1 - May 31	-	$ -	986,761	$ 1,048,231
June 1 - June 30	-	$ -	986,761	$ 1,048,231
July 1 - July 31	-	$ -	986,761	$ 1,048,231
August 1 - August 31	33,200	$ 1.98	1,019,961	$ 982,565
September 1 - September 30	27,500	$ 1.95	1,047,461	$ 928,905
October 1 - October 31	15,400	$ 1.95	1,062,861	$ 898,824
November 1 - November 30	30,220	$ 1.87	1,093,081	$ 842,238
December 1 - December 31	11,406	$ 1.97	1,104,487	$ 819,773

Performance Graph

The following graph compares the Company's cumulative total shareholder return since December 31, 2007 through December 31, 2012 with that of the NYSE MKT Composite Index and a peer group index. The Peer Group consists of companies selected on a line-of-business basis and includes Aspen Technology, Inc., L-3 Communications Holdings and Honeywell International. The graph assumes an initial investment of $100 on December 31, 2007 in the Company's common stock and each index. There were no dividends declared or paid by the Company during the five year period. The Company has never paid a dividend on its common stock. The indices are re-weighted daily, using the market capitalization on the previous tracking day. The comparisons shown in the graph below are based upon historical data. The stock price performance shown in the graph below is not necessarily indicative of, or intended to forecast, the potential future performance of the Company's common stock. The graph was prepared for the Company by Research Data Group, Inc.

	12/07	12/08	12/09	12/10	12/11	12/12
GSE Systems, Inc.	100.00	57.62	53.52	35.35	19.04	21.09
NYSE MKT Composite	100.00	62.15	82.82	104.10	112.59	121.01
Peer Group	100.00	57.94	71.21	89.16	93.03	113.11

ITEM 6. SELECTED FINANCIAL DATA.

Historical consolidated results of operations and balance sheet data presented below have been derived from the historical financial statements of the Company. This information should be read in connection with the Company's consolidated financial statements.

(in thousands, except per share data)	Years ended December 31,				
	2012	2011	2010	2009	2008
Consolidated Statements of Operations:					
Contract revenue	$ 52,246	$ 51,126	$ 47,213	$ 40,060	$ 29,004
Cost of revenue	34,509	34,781	36,081	29,736	21,187
Gross profit	17,737	16,345	11,132	10,324	7,817
Operating expenses:					
Selling, general and administrative	14,865	12,672	11,683	7,749	7,383
ESA related charges	-	-	-	1,508	-
Depreciation	562	497	579	504	446
Amortization of definite-lived intangible assets	313	948	102	-	-
Total operating expenses	15,740	14,117	12,364	9,761	7,829
Operating income (loss)	1,997	2,228	(1,232)	563	(12)
Interest income, net	162	131	19	56	130
ESA related charges	-	-	-	(865)	-
Gain (loss) on derivative instruments	(121)	(68)	(913)	763	(453)
Other income (expense), net	(175)	72	83	(397)	(226)
Income (loss) before income taxes	1,863	2,363	(2,043)	120	(561)
Provision (benefit) for income taxes	689	(438)	206	917	129
Net income (loss)	$ 1,174	$ 2,801	$ (2,249)	$ (797)	$ (690)
Basic income (loss) per common share (1)	$ 0.06	$ 0.15	$ (0.12)	$ (0.05)	$ (0.04)
Diluted income (loss) per common share (1)	$ 0.06	$ 0.15	$ (0.12)	$ (0.05)	$ (0.04)
Weighted average common shares outstanding:					
-Basic	18,384	18,952	18,975	16,938	15,747
-Diluted	18,458	19,123	18,975	16,938	15,747

	As of December 31,				
	2012	2011	2010	2009	2008
Balance Sheet data:					

Working capital	$ 29,782	$ 30,240	$ 30,040	$ 31,469	$ 13,888
Total assets	62,564	58,815	53,614	49,520	31,015
Long-term liabilities	1,459	2,352	799	206	906
Stockholders' equity	40,830	38,783	36,906	37,143	20,700

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

Critical Accounting Policies and Estimates.

As further discussed in Note 2 to the consolidated financial statements, in preparing the Company's 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 on Long-Term Contracts. The majority of the Company's revenue is derived through the sale of uniquely designed systems containing hardware, software and other materials under fixed-price contracts. In accordance with U.S. generally accepted accounting principles ("GAAP"), the revenue under these fixed-price contracts is accounted for on the percentage-of-completion method. This methodology recognizes revenue and earnings as work progresses on the contract and is based on an estimate of the revenue and earnings earned to date, less amounts recognized in prior periods. The Company bases its estimate of the degree of completion of the contract by reviewing the relationship of costs incurred to date to the expected total costs that will be incurred on the project. Estimated contract earnings are reviewed and revised periodically as the work progresses, and the cumulative effect of any change in estimate is recognized in the period in which the change is identified. Estimated losses are charged against earnings in the period such losses are identified. The Company recognizes revenue arising from contract claims either as income or as an offset against a potential loss only when the amount of the claim can be estimated reliably and realization is probable and there is a legal basis of the claim.

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

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

The Company's system design contracts do not normally provide for "post customer support service" (PCS) in terms of software upgrades, software enhancements or telephone support. In order to obtain PCS, the customers normally must 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 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.

Revenue for contracts with multiple elements is recognized in accordance with ASC 605-25 Revenue Recognition-Multiple Element Arrangements.

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

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 three year estimated useful life of the product. As of December 31, 2012, the Company has net capitalized software development costs of $2.4 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 sheet.

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 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, 2012, the Company's largest deferred tax asset of $4.4 million primarily relates to a U.S. net operating loss carryforward of $12.0 million which expires in various amounts between 2017 and 2030. 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 and Chinese subsidiaries, the recovery of the net deferred tax assets could not be substantiated by currently available

objective evidence. Accordingly, the Company has established a $7.0 million valuation allowance for its net deferred tax assets.

The decrease in revenue generated from the Slovak utility order was partially offset by growth in EnVision sales. EnVision product revenue increased from $2.5 million in 2011 to $3.9 million in 2012. In 2012, the Company received a $3.7 million contract to provide EnVision simulation and computer-based learning modules to a subsidiary of a global energy services company. Revenue generated by this contract totaled $2.5 million in 2012.

Results of Operations.

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

($ in thousands)	Years ended December 31,					
	2012	%	2011	%	2010	%
Contract revenue	$ 52,246	100.0 %	$ 51,126	100.0 %	$ 47,213	100.0 %
Cost of revenue	34,509	66.1 %	34,781	68.0 %	36,081	76.4 %
Gross profit	17,737	33.9 %	16,345	32.0 %	11,132	23.6 %
Operating expenses:						
Selling, general and administrative	14,865	28.5 %	12,672	24.8 %	11,683	24.7 %
Depreciation	562	1.1 %	497	1.0 %	579	1.2 %
Amortization of definite-lived intangible assets	313	0.6 %	948	1.9 %	102	0.2 %
Total operating expenses	15,740	30.2 %	14,117	27.7 %	12,364	26.1 %
Operating income (loss)	1,997	3.7 %	2,228	4.3 %	(1,232)	(2.6)%
Interest income, net	162	0.3 %	131	0.3 %	19	0.0 %
Loss on derivative instruments	(121)	(0.2)%	(68)	(0.1)%	(913)	(1.9)%
Other income (expense), net	(175)	(0.3)%	72	0.1 %	83	0.3 %
Income (loss) before income taxes	1,863	3.5 %	2,363	4.6 %	(2,043)	(4.3)%
Provision (benefit) for income taxes	689	1.3 %	(438)	(0.9)%	206	0.4 %
Net income (loss)	$ 1,174	2.2 %	$ 2,801	5.5 %	$ (2,249)	(4.8)%

Comparison of the Years Ended December 31, 2012 to December 31, 2011.

Contract Revenue. Contract revenue for the year ended December 31, 2012 totaled $52.2 million, which was 2.2% higher than the $51.1 million of revenue for the year ended December 31, 2011. The Company recorded total orders of $52.7 million in the year ended December 31, 2012 as compared to $44.4 million in the year ended December 31, 2011. Included in the 2012 and 2011 orders were $9.3 million and $3.0 million in change orders, respectively, for a contract to build a new nuclear power plant simulator for a two unit reactor plant in Slovakia. The 2012 change orders increased the total contract value to $36.0 million and included a provision which waived all previous claims related to this contract. In the years ended December 31, 2012 and 2011, the Company recognized $3.3 million and $5.0 million of contract revenue, respectively, on this project using the percentage-of-completion method, which accounted for 6.3% and 10.0% of the Company's consolidated revenue, respectively. In addition, revenue generated from various contracts that the Company has received from a German customer decreased by approximately $2.8 million for the year ended December 31, 2012 as compared to the year ended December 31, 2011. Partially offsetting these decreases in revenue were the following: EnVision product revenue increased from $2.5 million in 2011 to $3.9 million in 2012. In 2012, the Company received a $3.7 million contract to provide EnVision simulation and computer-based learning modules to a subsidiary of a global energy services company. Revenue generated by this contract totaled $2.5 million in 2012. GSE UK's revenue increased $1.3 million from 2011 to 2012 mainly due to a large engineering consultancy contract received during 2012. In addition, GSE Power Systems, AB's, a Swedish Corporation, revenue increased $1.2 million from 2011 to 2012 primarily due to an

increase in fossil simulation revenue.

At December 31, 2012, the Company's backlog was $51.9 million, of which $11.7 million related to the Slovakia contract. The Company's backlog increased 0.8% from December 31, 2011 when the Company's backlog totaled $51.5 million.

Gross Profit. Gross profit totaled $17.7 million for the year ended December 31, 2012 as compared to $16.3 million for the year ended December 31, 2011. As a percentage of revenue, gross profit increased from 32.0% for the twelve months ended December 31, 2011 to 33.9% for the twelve months ended December 31, 2012. The increase in gross margin reflects the following items:

The lower-margined $36.0 million full scope simulator and digital control system order received in 2009 from a Slovak utility made up 6.3% of the Company's total revenue in 2012 as compared to 10.0% of revenue in 2011. The $9.3 million change order from the Slovak utility received during 2012 increased the overall gross profit on the project and generated an additional $500,000 in gross profit on the project for the year ended December 31, 2012. In addition, the increased EnVision product revenue generated in 2012 as compared to 2011, which has an overall gross profit significantly higher than the Company's normal gross profit, attributed to the increase in the gross profit for the year ended December 31, 2012.

Selling, General and Administrative Expenses. Selling, general and administrative ("SG&A") expenses totaled $14.9 million and $12.7 million for the years ended December 31, 2012 and 2011, respectively. Fluctuations in the components of SG&A spending were as follows:

- Business development and marketing costs increased from $5.6 million for the year ended December 31, 2011 to $6.8 million in the year ended December 31, 2012. During 2012, the Company hired an additional three business development resources in the United States and hired two additional business development resources in Europe as compared to the prior year. During 2012, the Company held its biennial Simworld International Users Conference in Dubai and launched an expanded marketing and public relations program. Costs related to these programs totaled $382,000 for the year ended December 31, 2012. Bidding and proposal costs, which are the costs of operations personnel assisting with the preparation of contract proposals totaled $1.8 million for the year ended December 31, 2012, a $300,000 increase from the prior year.

- The Company's general and administrative expenses totaled $7.0 million and $6.0 million for the years ended December 31, 2012 and 2011, respectively. The increase of $1.0 million is primarily attributable to the following:

- The change in the fair value of contingent consideration related to the TAS and EnVision acquisitions resulted in expenses of $354,000 for the year ended December 31, 2012, as compared to a gain of $322,000 for the year ended December 31, 2011.
    - The Company implemented a global Enterprise Resource Planning system 2012. Costs related to the support and maintenance of this implementation totaled $396,000.
- The Company incurred $0 and $206,000 of expenses related to its acquisition efforts for the years ended December 31, 2012 and 2011, respectively. These acquisition costs were composed of legal, travel, due diligence, valuation and audit expenses.

♦ Gross spending on software product development ("development") expenses, for the twelve months ended December 31, 2012 totaled $2.4 million, as compared to $1.8 million for the twelve months ended December 31, 2011. The Company capitalized $1.3 million and $838,000 for the twelve months ended December 31, 2012 and 2011, respectively. Net development spending increased from $1.0 million for the twelve months ended December 31, 2011 to $1.1 million for the twelve months ended December 31, 2012.

- The Company created a 3D visualization team in January 2011 to develop 3D technology to add to our training programs. The Company incurred $334,000 and $300,000 of costs related to this effort for the twelve months ended December 31, 2012 and 2011, respectively.
- EnVision added an additional resource to its development team in 2012 and also began working on several new advancements mainly related to a gas-oil separation process and an upstream amine treatment unit. EnVision incurred $465,000 and $90,000 of development expense for the twelve months ended December 31, 2012 and 2011, respectively.
- Spending on other software product development totaled $1.6 million for the twelve months ended December 31, 2012. For the twelve months ended December 31, 2011, development expense totaled $1.5 million. The Company's development expenses were mainly related to advancements on a new configuration management system which is a central data warehouse that supports various forms of data on a simulator, new feature enhancements to our JADE platform, and advancements to our PSA-HD severe accident platform.

Depreciation. Depreciation expense totaled $562,000 and $497,000 for the years ended December 31, 2012 and 2011, respectively.

Amortization of definite-lived intangible assets. Amortization expense related to definite-lived intangible assets totaled $313,000 and $948,000 for the years ended December 31, 2012 and 2011, respectively. 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. In 2011, the Company accelerated the amortization expense related to one of TAS' customer relationships due to the completion of the customer contract. The acceleration resulted in an additional $116,000 on amortization expense in 2011.

Operating Income. The Company had operating income of $2.0 million (3.7% of revenue) in the year ended December 31, 2012, as compared with an operating income of $2.2 million (4.3% of revenue) for the year ended December 31, 2011. The variances were due to the factors outlined above.

Interest Income, Net. The Company's interest income, net totaled $162,000 and $131,000 for the years ended December 31, 2012 and 2011, respectively.

At December 31, 2012, the Company had a revolving credit agreement for a revolving line of credit with Susquehanna which is scheduled to expire on November 1, 2013. The credit facility enables the Company to borrow funds to support working capital needs and to collateralize letters of credit which will be issued as 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 deferred financing costs incurred when the Susquehanna line of credit was first established in 2011 are amortized over the two-year term of the line of credit. Amortization began in November 2011. Amortization of deferred financing costs totaled $12,000 and $2,000 for the twelve months ended December 31, 2012 and 2011, respectively.

At December 31, 2012 and 2011, the Company had approximately $1.8 million and $4.2 million, respectively, of cash in certificates of deposit and escrow accounts with Susquehanna and Bank of America, respectively, that were being used as collateral for various bid and performance bonds. An additional $0.8 million and $1.8 million were held in other certificates of deposit as of December 31, 2012, and 2011, respectively. The Company recorded interest income of $29,000 and $27,000 from the certificates of deposit and escrow accounts in the years ended December 31, 2012 and 2011, respectively.

The Company had $16.4 million and $8.2 million deposited in an unrestricted money market account with Susquehanna on December 31, 2012 and December 31, 2011, respectively. Interest income earned on the money market accounts totaled $43,000 and $35,000 for the years ended 2012 and 2011, respectively.

Interest income on deposits held by the Company's Swedish subsidiary increased from $65,000 in the year ended December 31, 2011 to $88,000 for the year ended December 31, 2012. The increase was primarily attributable to the higher cash balance held by the subsidiary during 2012.

The Company had other interest income of $14,000 and $6,000 for the years ended December 31, 2012 and 2011, respectively.

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, 2012, the Company had foreign exchange contracts outstanding of approximately 0.8 million Pounds Sterling, 9.9 million Euro, and 61.8 million Japanese Yen at fixed rates. The contracts expire on various dates through May 2016. 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 $202,000 for the twelve months ended December 31, 2012.

At December 31, 2011, the Company had foreign exchange contracts outstanding of approximately 3.1 million Pounds Sterling, 12.0 million Euro, and 383.5 million Japanese Yen at fixed rates. The contracts expire on various dates through May 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 $73,000 for the twelve months ended December 31, 2011.

The estimated net fair values of the contracts at December 31, 2012 and 2011 were a net asset (liability) of ($23,000) and $169,000, respectively, and were recorded on the balance sheets as follows:

(in thousands)	December 31, 2012	2011
Asset derivatives		
Prepaid expenses and other current assets	$ 296	$ 393
Other assets	20	90
	316	483
Liability derivatives		
Other current liabilities	(190)	(258)
Other liabilities	(149)	(56)
	(339)	(314)
Net fair value	$ (23)	$ 169

The foreign currency denominated trade receivables and unbilled receivables that are related to the outstanding foreign exchange contracts at December 31, 2012 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, 2012 and 2011, the Company incurred a gain (loss) of $81,000 and ($141,000), respectively, from the remeasurement of such trade and unbilled receivables.

Other Income (Expense), Net. The Company recognized ($175,000) of other expense, net for the year ended December 31, 2012 as compared to $72,000 of other income, net for the year ended December 31, 2011.

- During 2012 and 2011, the Company recognized a loss of $238,000 and $41,000, respectively, relating to its pro rata share of operating results from GSE-UNIS Simulation Technology Co., Ltd. In December 2012, GSE-UNIS had a reduction in force of 29 employees, reducing their headcount to 54. Approximately $100,000 of the 2012 equity loss was due to the severance accrued for this downsizing.
- The Company had other miscellaneous income of 63,000 and $113,000 for the years ended December 31, 2012 and 2011, respectively.

Provision for Income Taxes.

The Company files in the United States federal jurisdiction and in several state and foreign jurisdictions. Because of the net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from years 1997 and forward and is subject to foreign tax examinations by tax authorities for years 2006 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.

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

The Company, through its acquisition of EnVision on January 4, 2011, recognized deferred tax liabilities of $1.0 million resulting in a reduction of the Company's U.S. net deferred tax asset by the same amount. As a result of this acquisition, in accordance with ASC-805 Business Combinations, the Company reduced the valuation allowance on its U.S. net deferred tax assets and recognized the change in the valuation allowance ($1.0 million) through the income tax provision.

The Company, through its acquisition of EnVision on January 4, 2011, recorded $320,000 of unrecognized tax benefits as well as a receivable from the EnVision shareholders for the same amount as indemnity for this tax position. During 2012, the Company partially reduced both the liability and receivable from the EnVision acquisition by $269,000 as the related period is now outside the applicable statute of limitations. During 2011 and 2012, the Company also recorded $126,000 and $165,000 of unrecognized tax benefits for certain foreign tax contingencies, respectively. The Company made payments of $0 and $8,000 during 2011 and 2012, respectively, related to these foreign tax contingencies.

The Company's tax expense in 2012 was $689,000 and consisted of $19,000 state income taxes, $414,000 foreign income taxes incurred by the Company's foreign subsidiaries, $22,000 U.S. alternative minimum tax, $69,000 for foreign income tax withholding on several non-U.S. contracts, and $165,000 of foreign income tax contingency.

The Company's tax benefit in 2011 was $438,000 and consisted of $181,000 state income taxes, $108,000 foreign income taxes incurred by the Company's foreign subsidiaries, $62,000 U.S. alternative minimum tax, $85,000 for foreign income tax withholding on several non-U.S. contracts, $126,000 of foreign income tax contingency, and $1.0 million valuation allowance adjustment due to the EnVision acquisition, previously discussed.

The Company has a full valuation allowance on its U.S. net deferred tax assets at December 31, 2012.

Comparison of the Years Ended December 31, 2011 to December 31, 2010.

Contract Revenue. Contract revenue for the year ended December 31, 2011 totaled $51.1 million, which was 8.3% higher than the $47.2 million of revenue for the year ended December 31, 2010. The Company recorded total orders of $44.4 million in the year ended December 31, 2011 compared to $47.4 million in the year ended December 31, 2010. Included in the 2011 orders was $3.0 million in change orders for a contract to build a new nuclear power plant simulator for a two unit reactor plant in Slovakia which increased the total contract value from $23.8 million to $26.8 million. In the years ended December 31, 2011 and 2010, the Company recognized $5.0 million and $10.4 million of contract revenue, respectively, on this project using the percentage-of-completion method, which accounted for 10.0% and 22.0% of the Company's consolidated revenue, respectively. The decrease in revenue generated from the Slovak utility order was partially offset by the additional revenue generated due to the acquisitions of EnVision and TAS Engineering Consultants Ltd. ("TAS"). EnVision, which was acquired by the Company on January 4, 2011, generated approximately $2.5 million of revenue for the year ended December 31, 2011. TAS, which was acquired by the Company on April 26, 2010, generated revenue of $3.7 million and $2.4 million, for the year ended December 31, 2011, and for the period commencing on the closing date of the acquisition and ending on December 31, 2010, respectively. In addition, revenue generated from various contracts that the Company had received from a German customer increased by approximately $2.1 million for the year ended December 31, 2011 as compared to the year ended December 31, 2010. Furthermore, in 2011, the Company received a $2.9 million change order on its contract to provide a full scope AGR replacement simulator with a British utility which increased the total contract value from $4.7 million to $7.6 million. This change order resulted in a $2.5 million increase in revenue recognized on this contract from the year ended December 31, 2010, as compared to the year ended December 31, 2011.

At December 31, 2011, the Company's backlog was $51.5 million, of which $5.8 million related to the Slovakia contract. The Company's backlog decreased 7.9% from December 31, 2010 when the Company's backlog totaled $55.9 million.

Gross Profit. Gross profit totaled $16.3 million for the year ended December 31, 2011 compared to $11.1 million for the year ended December 31, 2010. As a percentage of revenue, gross profit increased from 23.6% for the twelve months ended December 31, 2010 to 32.0% for the twelve months ended December 31, 2011. The increase in gross margin reflects the following items:

The Company has a contract to provide a full scope AGR replacement simulator with a British utility. In 2010, disagreements arose with the customer over the extent and composition of the simulator testing procedures, the scope of certain plant systems being included in the simulator and the project schedule. These issues were resolved with the customer in early 2011; however, the resolution significantly increased the Company's costs to complete the contract. In the fourth quarter 2010, the Company revised its estimates to complete the project and recorded a $1.2 million loss on the project. Negotiations with the customer for additional funding on the project were completed in the fourth quarter 2011, and the Company received a change order which increased the total contract value from $4.7 million to $7.6 million.

The lower-margined $26.8 million full scope simulator and digital control system order received in 2009 from a Slovak utility made up 10% of the Company's total revenue in 2011 compared to 22% of revenue in 2010. The $3.0 million change order that was received on this contract in 2011 increased the overall gross margin on the project by approximately $585,000 in 2011.

In 2011, the Company's newly acquired subsidiary, EnVision, generated revenue of $2.5 million. EnVision's gross margins are higher than the Company's normal gross margin.

Selling, General and Administrative Expenses. Selling, general and administrative ("SG&A") expenses totaled $12.7 million and $11.7 million for the years ended December 31, 2011 and 2010, respectively. Fluctuations in the components of SG&A spending were as follows:

- Business development and marketing costs increased from $4.2 million for the year ended December 31, 2010 to $5.6 million in the year ended December 31, 2011. During the first quarter of 2011, the Company underwent an internal reorganization whereby a number of operational personnel were reallocated to business development activities on a full time basis. TAS and EnVision incurred approximately $764,000 of business development and marketing costs for the twelve months ended December 31, 2011, compared to $216,000 incurred by TAS for the twelve months ended December 31, 2010. Also contributing to the increase in business development costs in 2011 was the hiring of a business development manager in the United Kingdom in May 2010. Bidding and proposal costs, which are the costs of operations personnel assisting with the preparation of contract proposals totaled $1.5 million for the year ended December 31, 2011, an $84,000 increase from the prior year.

- The Company's general and administrative expenses totaled $6.0 million and $6.8 million for the years ended December 31, 2011 and 2010, respectively. The decrease of $800,000 is primarily attributable to the following:

  - The change in the fair value of contingent consideration related to the TAS and EnVision acquisitions resulted in a gain of $322,000 for the year ended December 31, 2011, as compared to a loss of $147,000 for the year ended December 31, 2010.
  - The Company incurred approximately $206,000 of expenses related to its acquisition efforts for the year ended December 31, 2011. These acquisition costs were composed of legal, travel, due diligence, valuation and audit expenses. The Company incurred $710,000 of acquisition related costs in 2010.

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- ♦ Gross spending on software product development ("development") expenses, for the twelve months ended December 31, 2011 totaled $1.8 million, as compared to $1.6 million for the twelve months ended December 31, 2010. The Company capitalized $838,000 and $903,000 for the twelve months ended December 31, 2011 and 2010, respectively. Net development spending increased from $663,000 for the twelve months ended December 31, 2010 to $1.0 million for the twelve months ended December 31, 2011.
  - o The Company created a 3D visualization team in January 2011 to develop 3D technology to add to our training programs. The Company incurred $300,000 of costs related to this effort for the twelve months ended December 31, 2011.
  - o Spending on other software product development totaled $1.5 million for the twelve months ended December 31, 2011. For the twelve months ended December 31, 2010, development expense totaled $1.6 million. The Company's development expenses were mainly related to advancements on a new configuration management system which is a central data warehouse that supports various forms of data on a simulator, new feature enhancements to our JADE platform, and advancements to our PSA-HD severe accident platform. EnVision incurred $90,000 of development expense for the twelve months ended December 31, 2011.

Depreciation. Depreciation expense totaled $497,000 and $579,000 for the years ended December 31, 2011 and 2010, respectively. In 2007, the Company had purchased approximately $400,000 of computers and furniture for a training center at Strathclyde University in the UK and a demonstration center at its Sykesville headquarters. These items were fully depreciated at the end of 2010.

Amortization of definite-lived intangible assets. Amortization expense related to definite-lived intangible assets totaled $948,000 and $102,000 for the years ended December 31, 2011 and 2010, respectively. 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. As part of the Company's acquisition of TAS in 2010, the Company recorded intangible assets totaling approximately $740,000 with estimated lives of one to ten years. The Company also recorded intangible assets of $1.5 million with estimated lives of three to eight years as part of the EnVision acquisition in 2011.

Operating Income (Loss). The Company had operating income of $2.2 million (4.3% of revenue) in the year ended December 31, 2011, as compared with an operating loss of $1.2 million (2.6% of revenue) for the year ended December 31, 2010. The variances were due to the factors outlined above.

Interest Income, Net. The Company's interest income, net totaled $131,000 and $19,000 for the years ended December 31, 2011 and 2010, respectively.

At December 31, 2011, the Company had a revolving credit agreement for a revolving line of credit with Susquehanna which is scheduled to expire on November 1, 2013. The credit facility enables the Company to borrow funds to support working capital needs and to collateralize letters of credit which will be issued as 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 deferred financing costs incurred when the Susquehanna line of credit was first established in 2011 are amortized over the two-year term of the line of credit. Amortization began in November 2011. The deferred financing costs incurred in conjunction with the Company's terminated Bank of America ("BOA") lines of credit were fully amortized as of December 31, 2010. Amortization of deferred financing costs totaled $2,000 and $92,000 for the twelve months ended December 31, 2011 and 2010, respectively.

At December 31, 2011 and 2010, the Company had approximately $4.2 million and $179,000, respectively, of cash in certificates of deposit with BOA that were being used as collateral for various bid and performance bonds. An additional $1.8 million and $600,000 was held in other certificates of deposit as of December 31, 2011, and 2010, respectively. The Company recorded interest income of $27,000 and $18,000 from the certificates of deposit in the years ended December 31, 2011 and 2010, respectively.

The Company had $8.2 million deposited in a money market account with Susquehanna on December 31, 2011. The Company had $17.0 million deposited in a money market account with BOA on December 31, 2010. Interest income earned on the money market accounts totaled $35,000 and $84,000 for the years ended 2011 and 2010, respectively.

In May 2007, the Company deposited $1.2 million into a restricted, interest-bearing account at the Union National Bank in the United Arab Emirates as a partial guarantee for the $11.8 million credit facility that UNB has extended to ESA. GSE recorded no interest income in the years ended December 31, 2011 and 2010, respectively. In 2009, the Company determined that its investment in ESA was impaired. As such, the Company established a full reserve for the amount in restricted cash amount as of December 31, 2009. In 2011 and 2010, Union National Bank withdrew a total of $78,000 and $294,000, respectively from the cash GSE had on deposit with them as a partial guarantee against ESA's line of credit; at December 31, 2011 the Company had $926,000 remaining in the restricted UNB account.

Interest income on deposits held by the Company's Swedish subsidiary increased from $8,000 in the year ended December 31, 2010 to $65,000 for the year ended December 31, 2011. The increase was primarily attributable to the higher cash balance held by the subsidiary during 2011.

The Company had other interest income in the year ended December 31, 2011 of $6,000 and $1,000 for the years ended December 31, 2011 and 2010, respectively. The increase was primarily driven by the acquisition of EnVision in January 2011.

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, 2011, the Company had foreign exchange contracts outstanding of approximately 3.1 million Pounds Sterling, 12.0 million Euro, and 383.5 million Japanese Yen at fixed rates. The contracts expire on various dates through May 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 $73,000 for the twelve months ended December 31, 2011.

At December 31, 2010, the Company had foreign exchange contracts outstanding of approximately 1.6 million Pounds Sterling, 10.6 million Euro, and 865.2 million Japanese Yen at fixed rates. The contracts expire on various dates through February 2014. The Company had not designated the contracts as hedges and had recognized a loss on the change in the estimated fair value of the contracts of $745,000 for the twelve months ended December 31, 2010.

The estimated net fair values of the contracts at December 31, 2011 and 2010 were a net asset of $169,000 and $81,000, respectively, and were recorded on the balance sheets as follows:

	December 31,	
(in thousands)	2011	2010
Asset derivatives		
Prepaid expenses and other current assets	$ 393	$ 208
Other assets	90	117
	483	325
Liability derivatives		
Other current liabilities	(258)	(204)
Other liabilities	(56)	(40)
	(314)	(244)
Net fair value	$ 169	$ 81

The foreign currency denominated trade receivables and unbilled receivables that are related to the outstanding foreign exchange contracts at December 31, 2011 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, 2011 and 2010, the Company incurred a loss of $141,000 and $168,000, respectively, from the remeasurement of such trade and unbilled receivables.

Other Income (Expense), Net. The Company recognized $72,000 of other income, net for the year ended December 31, 2011 compared to $83,000 of other income, net for the year ended December 31, 2010.

Provision for Income Taxes.

The Company files in the United States federal jurisdiction and in several state and foreign jurisdictions. Because of the net operating loss carryforwards, the Company is subject to U.S. federal and state income tax examinations from years 1997 and forward and is subject to foreign tax examinations by tax authorities for years 2006 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.

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

The Company, through its acquisition of EnVision on January 4, 2011, recognized deferred tax liabilities of $1.0 million resulting in a reduction of the Company's U.S. net deferred tax asset by the same amount. As a result of this acquisition, in accordance with ASC-805 Business Combinations, the Company reduced the valuation allowance on its U.S. net deferred tax assets and recognized the change in the valuation allowance ($1.0 million) through the income tax provision.

The Company, through its acquisition of EnVision on January 4, 2011, recorded $320,000 of unrecognized tax benefits as well as a receivable from the EnVision shareholders for the same amount as indemnity for this tax position. During 2011, the Company also recorded $126,000 of unrecognized tax benefits in 2011 for certain foreign tax contingencies.

The Company's tax benefit in 2011 was $438,000 and consisted of $181,000 state income taxes, $108,000 foreign income taxes incurred by the Company's foreign subsidiaries, $62,000 U.S. alternative minimum tax, $85,000 for foreign income tax withholding on several non-U.S. contracts, $126,000 of foreign income tax contingency, and $1.0 million valuation allowance adjustment due to the EnVision acquisition, previously discussed.

The Company's tax provision in 2010 was $206,000 and consisted of $9,000 state income taxes, $382,000 foreign income taxes incurred by the Company's foreign subsidiaries, and a $185,000 net credit for foreign income tax withholding on several non-U.S. contracts. In the first quarter 2010, the Company reversed a $400,000 accrual for foreign income tax withholding on a contract that it completed in China. Partially offsetting this credit were withholding taxes totaling approximately $215,000 on various contracts completed in Mexico, South Korea and Canada.

The Company had a full valuation allowance on its U.S. and Scottish net deferred tax assets at December 31, 2011.

Liquidity and Capital Resources.

As of December 31, 2012, GSE had cash and cash equivalents of $22.4 million compared to $20.3 million at December 31, 2011.

Cash Provided By Operating Activities. For the year ended December 31, 2012, net cash provided by operating activities totaled $3.7 million which was an increase of $2.1 million as compared to the year ended December 31, 2011.

Significant changes in the Company's assets and liabilities in the year ended December 31, 2012 included:

- A $3.3 million increase in the Company's contracts receivable. The Company's trade receivables, net of the allowance for doubtful accounts, increased from $8.1 million at December 31, 2011 to $12.4 million at December 31, 2012. Through February 28, 2013, the Company collected 54% of the gross trade receivables outstanding as of December 31, 2012. The Company's unbilled receivables decreased by $919,000 to $11.3 million at December 31, 2012. 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 2013, the Company invoiced $3.3 million of the unbilled amounts; the balance of the unbilled amounts is expected to be invoiced and collected within one year. At December 31, 2012, trade receivables outstanding for more than 90 days totaled $2.5 million compared to $278,000 at December 31, 2011.
- A $1.4 million decrease in prepaid expenses and other assets. The decrease is primarily attributable to the redemption of certificates of deposit in 2012. The balance of certificates of deposit recorded in Other Current Assets decreased from $1.8 million to $0.8 million as of December 31, 2011 and 2012, respectively.
    - A $1.4 million increase in accounts payable, accrued compensation and accrued expenses. The Company's December 31, 2012 subcontractor accrual increased $950,000 due to the progression of work on several projects utilizing subcontractor labor and the related timing of the billing milestones on those contracts.

For the year ended December 31, 2011, net cash provided by operating activities totaled $1.6 million which was a decrease of $864,000 as compared to the year ended December 31, 2010. Significant changes in the Company's assets and liabilities in the year ended December 31, 2011 included:

- A $2.1 million increase in the Company's contracts receivable. The Company's trade receivables, net of the allowance for doubtful accounts, increased from $5.7 million at December 31, 2010 to $8.1 million at December 31, 2011. The Company's unbilled receivables increased by $726,000 to $12.2 million at December 31, 2011. The increase in the unbilled receivables was due to the timing of contracted billing milestones of the Company's current projects. At December 31, 2011, trade receivables outstanding for more than 90 days totaled $278,000 compared to $318,000 at December 31, 2010, excluding the $1.6 million due from ESA which had been fully reserved at December 31, 2010 and completely written off at December 31, 2011.
- A $1.5 million increase in prepaid expenses and other assets. The increase was primarily attributable to the reclassifications of certificates of deposit from restricted cash to other current assets totaling $1.8 million. The reclassifications represent the expiration of performance bonds and the release of collateral restrictions associated with the Company's terminated BOA line of credit. This increase was offset by a reduction in the Company's Value Added Tax ("VAT") receivable of $298,000 at December 31, 2011 as compared to the prior year. VAT is included in payments the Company makes to Siemens for the DCS system being provided to a Slovak utility.
- An $855,000 decrease in accounts payable, accrued compensation and accrued expenses. The Company's December 31, 2011 subcontractor accrual decreased $750,000 as the Company made several large payments to subcontractors during 2011 which had been accrued at December 31, 2010. In addition, the Company's accounts payable, and accrued liabilities also decreased $650,000 of which $358,000 was accrued at December 31, 2010 related to the Company's acquisition efforts. At December 31, 2011, the Company had $0 accrued related to its acquisition efforts. Offsetting the decreases above, accrued compensation increased $600,000 primarily due to an increase in the Company's headcount and incentive compensation targets from December 31, 2010 to December 31, 2011.
- An $856,000 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.

For the year ended December 31, 2010, net cash provided by operating activities totaled $2.4 million which was an increase of $2.1 million as compared to the year ended December 31, 2009. Significant changes in the Company's assets and liabilities in the year ended December 31, 2010 included:

- A $903,000 increase in the Company's contracts receivable. The Company's trade receivables, net of the allowance for doubtful accounts, decreased from $6.4 million at December 31, 2009 to $5.7 million at December 31, 2010. The Company's unbilled receivables increased by $2.0 million to $11.5 million at December 31, 2010. The increase in the unbilled receivables was due to the timing of contracted billing milestones of the Company's projects. At December 31, 2010, trade receivables outstanding for more than 90 days totaled $318,000 compared to $1.4 million at December 31, 2009, excluding the $1.6 million due from ESA which had been fully reserved at both dates. In January 2011, the Company received a stop work order from NuScale Power ("NuScale"). NuScale's primary investor was a defendant in a lawsuit brought by the Securities and Exchange Commission and has ceased funding NuScale's current operations. As such, the Company increased its bad debt reserve approximately $400,000 as of December 31, 2010.
- A $922,000 increase in prepaid expenses and other assets. The Company's Value Added Tax ("VAT") receivable increased $250,000 at December 31, 2010 as compared to the prior year. VAT is included in payments the Company makes to Siemens for the DCS system being provided to a Slovak utility. GSE has filed for a refund of the VAT paid. In addition, prepaid foreign income taxes and employee advances increased a combined $400,000 from 2009.
- A $932,000 increase in accounts payable, accrued compensation and accrued expenses. The Company's accounts payable and accrued liabilities had increased $358,000 due to the costs accrued related to the Company's acquisition efforts as of December 31, 2010. Additionally, accrued compensation increased $305,000 primarily due to an increase in the Company's headcount from December 31, 2009 to December 31, 2010.
- A $1.7 million increase in billings in excess of revenue earned. The increase was due to the timing of contracted billing milestones of the Company's projects.

Cash (Used in) Investing Activities. For the year ended December 31, 2012, net cash used in investing activities was $868,000.

Included in the Company's capital expenditures of $1.6 million in 2012 was $1.1 million for the Company's purchase and implementation of a global Enterprise Resource Planning (ERP) system. Capitalized software development costs totaled $1.3 million for the year ended December 31, 2012. On a net basis, total cash being utilized as cash collateral for standby letters of credit, bank guarantees and foreign currency contracts decreased by $2.5 million in 2012.

During the year ended December 31, 2012, the Company made an additional equity contribution totaling $469,000 to GSE-UNIS Simulation Technology Co., Ltd. ("GSE-UNIS"). GSE-UNIS is 51% owned by Beijing UNIS Investment Co., Ltd. and 49% owned by GSE.

For the year ended December 31, 2011, net cash used in investing activities was $6.7 million. The increase was primarily the result of BOA's amendments to the Company's revolving credit agreements effective March 14, 2011, which required the Company to cash collateralize all existing standby letters of credit. At December 31, 2011, the Company had $4.4 million of restricted cash. The balance represents a $4.1 million increase from December 31, 2010.

The Company made capital expenditures of $520,000 and capitalized software development costs of $838,000. Cash used as collateral for standby letters of credit, bank guarantees and foreign currency contracts increased by $4.0 million.

Effective January 4, 2011, GSE Systems Inc., completed the acquisition of EnVision Systems, Inc. (“EnVision). The purchase price totaled $4.0 million with $1.2 million paid in cash at closing. The balance is deferred until the first, second, and third anniversaries of the closing date. In the second quarter of 2011, the Company made payments of $74,000 to EnVision’s shareholders related to billed receivables included on the Closing Date balance sheet. An additional payment of $109,000 to the EnVision shareholders was made during the second quarter of 2011 related to the working capital true-up provisions of the purchase agreement. GSE acquired approximately $550,000 in cash through the acquisition of EnVision.

During the year ended December 31, 2011, the Company made an additional equity contribution totaling $456,000 to GSE-UNIS Simulation Technology Co., Ltd. (“GSE-UNIS”). GSE-UNIS is 51% owned by Beijing UNIS Investment Co., Ltd. and 49% owned by GSE.

For the year ended December 31, 2010, net cash used in investing activities was $1.3 million. The Company made capital expenditures of $519,000 and capitalized software development costs of $903,000. Cash used as collateral for standby letters of credit, bank guarantees and foreign currency contracts decreased by $841,000.

Effective April 26, 2010, GSE Systems Inc., through its wholly owned subsidiary GSE Systems, Ltd. (GSE UK), completed the acquisition of TAS Holdings Ltd. The purchase price totaled approximately $2.3 million with approximately $500,000 paid in cash at closing, $683,000 paid post-closing in GSE common stock, approximately $100,000 was paid during September 2010, and the balance deferred until the first and second anniversary of the closing date. TAS had approximately $68,000 cash on their balance sheet as of the acquisition date.

On the closing date, TAS entered into a sale and leaseback agreement with the former TAS shareholders. Under the terms of the agreement, the TAS shareholders purchased the building occupied by TAS for approximately $377,000 in cash and TAS entered into a five-year lease for approximately $31,000 per year, payable in equal monthly installments. The Company terminated the lease in December 2012 with approval from the TAS shareholders and relocated to a new office.

On July 28, 2010, GSE-UNIS Simulation Technology Co., Ltd. (“GSE-UNIS”), a limited liability company, received a formal business license from the Chinese government. GSE-UNIS is 51% owned by Beijing UNIS Investment Co., Ltd. (“UNIS”) and 49% owned by GSE. On October 1, 2010, the Company contributed $587,000 in cash, as its initial investment to GSE-UNIS. In September 2010, UNIS contributed approximately $600,000 in cash as its initial investment to GSE-UNIS.

Cash Provided by (Used in) Financing Activities. For the year ended December 31, 2012, net cash used in financing activities totaled $1.1 million.

The Company repurchased 280,113 shares of the Company’s common stock at an aggregate cost of $531,000, and received $272,000 from the issuance of common stock from the exercise of employee stock options for the year ended December 31, 2012. During the year ended December 31, 2012, the Company made payments of the liability-classified contingent consideration arrangements to the former shareholders of TAS and EnVision totaling $845,000.

For the year ended December 31, 2011, net cash used in financing activities was $1.1 million. The Company repurchased 824,374 shares of the Company's common stock at an aggregate cost of $1.6 million. The Company released $600,000 held in a restricted certificate of deposit in conjunction with the termination of the Company's BOA lines of credit. In December 2011, the Company made a $167,000 payment in relation to the liability classified contingent-consideration associated with the acquisition of TAS. Additionally, the Company received $143,000 from the issuance of common stock from the exercise of warrants and employee stock options and spent $24,000 on deferred financing costs in conjunction with the Susquehanna line of credit agreement.

For the year ended December 31, 2010, net cash provided by financing activities totaled $94,000. The Company received $176,000 from the issuance of common stock from the exercise of warrants and employee stock options and spent $82,000 on deferred financing costs in conjunction with the Bank of America lines of credit.

Credit Facilities

At December 31, 2012, the Company had a Master Loan and Security Agreement and Revolving Credit Note with Susquehanna. The Company and its subsidiaries, GSE Power Systems, Inc. and GSE EnVision LLC, were 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 two-year agreement is to expire on November 1, 2013.

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, inventory, proceeds and products, intangibles, trademarks, patents, intellectual property, machinery and equipment.

Initially, all (i) issuances of stand-by letters of credit and (ii) advances of working capital (collectively referred to as the "Advances") required that the Company maintain cash balances (the "Cash Balance Requirement") at the Bank in an amount equal to the Advances, with a minimum of $3.0 million at all times. The Cash Balance Requirement was to be reduced to the minimum amount if the Company's consolidated net income after taxes (exclusive of (a) gains and losses on derivatives and (b) stock option expense), as defined ("Net Income"), was positive for the year ending December 31, 2011. Thereafter, the Cash Balance Requirement remains at the minimum amount as long as the Company's quarterly Net Income commencing for the quarter ending March 31, 2012, remains positive and the Company is in compliance with the covenants. If the Company's quarterly Net Income is negative or the Company is not in compliance with the covenants, the Cash Balance Requirement will revert to the amount of the Advances until the Company attains positive Net Income for two consecutive quarters. The credit agreements contain certain restrictive covenants regarding future acquisitions and incurrence of debt. In addition, the credit agreements contain financial covenants with respect to the Company's cash flow coverage ratio, minimum tangible capital base, quick ratio, and tangible capital base ratio. At December 31, 2012, the Company had not paid any interest or principal payments related to any borrowings for over one year. As such the cash flow coverage ratio is not applicable at December 31, 2012.

	Covenant	As of December 31, 2012
Minimum tangible capital base	Must Exceed $26.0 million	$33.0 million
Quick ratio	Must Exceed 2.00 : 1.00	2.47 : 1.00
		.66 : 1.00

Tangible capital base ratio	Not to Exceed .75 : 1.00

For the quarter ended December 31, 2012 the Company's Net Income, as defined above, was positive. As such, the Company will currently be required to maintain cash balances of $3.0 million at Susquehanna. At December 31, 2012, the Company had $3.1 million in Advances, all of which consisted of outstanding stand-by letters of credit.

Contractual Cash Commitments

The following summarizes the Company's contractual cash obligations as of December 31, 2012, and the effect these obligations are expected to have on its liquidity and cash flow in future periods:

	Payments Due by Period (in thousands)				
Contractual Cash Obligations	Total	Less than 1 year	1-3 Years	4-5 Years	After 5 Years
Long Term Debt	$ -	$ -	$ -	$ -	$ -
Subcontractor and Purchase Commitments	$ 8,271	$ 8,271	$ -	$ -	$ -
Net Future Minimum Lease Payments	$ 4,470	$ 979	$ 1,310	$ 1,535	$ 646
Total	$ 12,741	$ 9,250	$ 1,310	$ 1,535	$ 646

As of December 31, 2012, the Company was contingently liable for fourteen standby letters of credit and five surety bonds totaling $6.0 million which represent bid and performance bonds on fifteen contracts. The Company has deposited the full value of six standby letters of credit, $1.8 million, into money market escrow accounts and certificates of deposit 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 balance sheet at December 31, 2012 as restricted cash and long-term restricted cash depending on the expiration date of the underlying letters of credit. An additional seven letters of credit for $3.1 million have been collateralized using the Company's line of credit at December 31, 2012.

As of December 31, 2011, the Company was contingently liable for ten standby letters of credit and three surety bonds totaling $5.6 million which represented bid and performance bonds on eight contracts. The Company had deposited the full value of eight standby letters of credit, $4.2 million, in certificates of deposit, which had been restricted in that the Company did not have access to these funds until the related letter of credit expired. The cash was recorded on the Company's balance sheet at December 31, 2012 as restricted cash. An additional two letters of credit had been collateralized using the Company's line of credit.

At December 31, 2012, the Company has $928,000 in a restricted, interest-bearing account at the Union National Bank ("UNB") in the United Arab Emirates as a partial guarantee for the $11.8 million credit facility that UNB has extended to the Emirates Simulation Academy. The Company had a full reserve against the restricted cash account as of December 31, 2012. Any interest income earned from this account in 2012, 2011, and 2010 was not recorded in interest income but was credited to the reserve balance. In 2012, 2011, and 2010, Union National Bank withdrew a total of $0, $78,000, and $294,000, respectively, from the account.

2013 Liquidity Outlook

At December 31, 2012, the Company had cash and cash equivalents of $22.4 million and another $4.4 million available under its line of credit. In addition, the Company has $1.9 million of restricted cash, and $0.8 million of unrestricted certificates of deposit. The Company expects $1.6 million of these certificates of deposit to mature and convert to cash during 2013. In November 2011 the Company entered into a Master Loan and Security Agreement and Revolving Credit Note with Susquehanna Bank ("Susquehanna"). 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 is to expire on November 1, 2013. As the Company's Net Income for the year ended December 31, 2012 was positive, the Company currently will only be required to maintain cash balances of $3.0 million at the Bank. At December 31, 2012, the Company had $3.1 million in Advances, all of which consisted of outstanding stand-by letters of credit.

The Company has entered into 2013 with $51.9 million of backlog; $36.2 million of which is expected to convert to revenue in 2013. 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. However, 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.

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, 2012, except for its operating lease commitments and outstanding letters of credit and surety bonds. See Contractual Cash Commitments above.

New Accounting Standards.

In September 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2011-08, Intangibles — Goodwill and Other (Topic 350) — Testing Goodwill for Impairment (“ASU 2011-08”), to allow entities to use a qualitative approach to test goodwill for impairment. ASU 2011-08 permits an entity to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded this is the case, it is necessary to perform the currently prescribed two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. ASU 2011-08 is effective for the Company for interim and annual periods ended during 2012, with earlier application permitted. The adoption of this guidance had no impact on the Company’s consolidated financial statements.

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, 2012, 42% of the Company's revenue was from contracts which required payments in a currency other than U.S. Dollars, principally Euros (11%), Japanese Yen (9%), British Pounds Sterling (16%), Chinese Renminbi (3%) and Swedish Krona (3%). For the years ended December 31, 2011 and 2010, 44% and 44%, respectively, 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 and Japanese Yen.

In addition, during the years ended December 31, 2012, 2011 and 2010, 17%, 18% and 13%, respectively, of the Company's expenses were incurred in Swedish Krona. 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, 2012, the Company had foreign exchange contracts outstanding of approximately 0.8 million Pounds Sterling, 9.9 million Euro, and 61.8 million Japanese Yen at fixed rates. The contracts expire on various dates through May 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 $202,000 for the year ended December 31, 2012. The estimated fair value of the contracts was a net liability of $23,000 at December 31, 2012. The Company recognized a gain of $73,000 for the year ended December 31, 2011, and a loss of $745,000 for the year ended December 31, 2010, 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, 2012 would have increased/decreased the change in estimated fair value of the contracts by $2,300.

GSE SYSTEMS, INC.
FORM 10-K
For the Year Ended December 31, 2012

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm – Consolidated Financial Statements

The Board of Directors and Stockholders
GSE Systems, Inc.:

We have audited the accompanying consolidated balance sheets of GSE Systems, Inc. and subsidiaries (the "Company") as of December 31, 2012 and 2011, and the related statements of operations, comprehensive income (loss), changes in stockholders' equity and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards as established by the Auditing Standards Board (United States) and in accordance with the auditing 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 audit 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. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012 in conformity with U.S. generally accepted accounting principles.

/s/ KPMG LLP

Baltimore, Maryland
March 11, 2013

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

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

	December 31, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$22,386	$20,326
Restricted cash	743	3,505
Contract receivables, net	23,716	20,356
Prepaid expenses and other current assets	3,212	3,733
Total current assets	50,057	47,920
Equipment, software and leasehold improvements	6,733	5,206
Accumulated depreciation	(4,653)	(4,105)
Equipment, software and leasehold improvements, net	2,080	1,101
Software development costs, net	2,426	1,815
Goodwill	4,502	4,462
Intangible assets, net	911	1,207
Long-term restricted cash	1,192	897
Other assets	1,396	1,413
Total assets	$62,564	$58,815
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$4,980	$4,077
Accrued expenses	2,287	1,581
Accrued compensation and payroll taxes	2,715	2,754
Billings in excess of revenue earned	5,993	5,261
Accrued warranty	2,107	2,300
Other current liabilities	2,193	1,707
Total current liabilities	20,275	17,680
Other liabilities	1,459	2,352
Total liabilities	21,734	20,032
Commitments and contingencies	-	-
Stockholders' equity:		
Preferred stock $.01 par value, 2,000,000 shares authorized, shares issued and outstanding none in 2012 and 2011	-	-
Common stock $.01 par value, 30,000,000 shares authorized, shares issued 19,435,324 in 2012 and 19,254,681 in 2011	194	193
Additional paid-in capital	71,352	70,167
Accumulated deficit	(27,889)	(29,063)
Accumulated other comprehensive loss	(647)	(865)
Treasury stock at cost, 1,104,487 shares in 2012 and 824,374 shares in 2011	(2,180)	(1,649)

Total stockholders' equity	40,830	38,783
Total liabilities and stockholders' equity	$62,564	$58,815

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

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

	Years ended December 31,		
	2012	2011	2010
Contract revenue	$52,246	$51,126	$47,213
Cost of revenue	34,509	34,781	36,081
Gross profit	17,737	16,345	11,132
Operating expenses			
Selling, general and administrative	14,865	12,672	11,683
Depreciation	562	497	579
Amortization of definite-lived intangible assets	313	948	102
Total operating expenses	15,740	14,117	12,364
Operating income (loss)	1,997	2,228	(1,232)
Interest income, net	162	131	19
Loss on derivative instruments, net	(121)	(68)	(913)
Other income (expense), net	(175)	72	83
Income (loss) before income taxes	1,863	2,363	(2,043)
Provision (benefit) for income taxes	689	(438)	206
Net income (loss)	$1,174	$2,801	$(2,249)
Basic income (loss) per common share	$0.06	$0.15	$(0.12)
Diluted income (loss) per common share	$0.06	$0.15	$(0.12)

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

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

	Years ended December 31,		
	2012	2011	2010
Net income (loss)	$1,174	$2,801	$(2,249)
Foreign currency translation adjustment	218	(145)	270
Comprehensive income (loss)	$1,392	$2,656	$(1,979)

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

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

	Common Stock		Additional Paid-in	Accumulated	Accumulated Other Comprehensive	Treasury Stock		
	Shares	Amount	Capital	Deficit	Loss	Shares	Amount	Total
Balance, December 31, 2009	18,930	$ 189	$ 67,559	$ (29,615)	$ (990)	-	$ -	$ 37,143
Stock-based compensation expense	-	-	807	-	-	-	-	807
Common stock issued for options exercised	57	2	95	-	-	-	-	97
Common stock issued for warrants exercised	45	-	79	-	-	-	-	79
Common stock issued for services provided	17	-	76	-	-	-	-	76
Common stock issued for TAS acquisition	123	1	682	-	-	-	-	683
Foreign currency translation adjustment	-	-	-	-	270	-	-	270
Net loss	-	-	-	(2,249)	-	-	-	(2,249)
Balance, December 31, 2010	19,172	$ 192	$ 69,298	$ (31,864)	$ (720)	-	$ -	$ 36,906
Stock-based compensation expense	-	-	727	-	-	-	-	727
Common stock issued for options exercised	77	1	132	-	-	-	-	133
Common stock issued for warrants exercised	6	-	10	-	-	-	-	10
Foreign currency translation adjustment	-	-	-	-	(145)	-	-	(145)
Treasury stock at cost	-	-	-	-	-	(824)	(1,649)	(1,649)
Net income	-	-	-	2,801	-	-	-	2,801
Balance, December 31, 2011	19,255	$ 193	$ 70,167	$ (29,063)	$ (865)	(824)	$ (1,649)	$ 38,783
Stock-based compensation expense	-	-	914	-	-	-	-	914
Common stock issued for options exercised	180	1	271	-	-	-	-	272
Foreign currency translation adjustment	-	-	-	-	218	-	-	218

Treasury stock at cost	-	-	-	-	-	(280)	(531)	(531)
Net income	-	-	-	1,174	-	-	-	1,174
Balance, December 31, 2012	19,435	$ 194	$ 71,352	$ (27,889)	$ (647)	(1,104)	$ (2,180)	$ 40,830

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

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

	Years ended December 31,		
	2012	2011	2010
Cash flows from operating activities:			
Net income (loss)	$ 1,174	$ 2,801	$ (2,249)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation	562	497	579
Amortization of definite-lived intangible assets	313	948	102
Capitalized software amortization	704	813	978
Amortization of deferred financing costs	12	2	92
Change in fair value of contingent consideration	354	(322)	147
Stock-based compensation expense	914	727	883
Equity loss on investment in GSE-UNIS Simulation Technology Co. Ltd.	238	41	13
Loss on derivative instruments	121	68	913
Changes in assets and liabilities:			
Contract receivables	(3,331)	(2,099)	(903)
Prepaid expenses and other assets	1,379	(1,494)	(922)
Accounts payable, accrued compensation and accrued expenses	1,403	(855)	932
Billings in excess of revenue earned	792	856	1,669
Accrued warranty reserves	(193)	620	407
Other liabilities	(702)	(1,035)	(209)
Net cash provided by operating activities	3,740	1,568	2,432
Cash flows from investing activities:			
Capital expenditures	(1,551)	(520)	(519)
Capitalized software development costs	(1,315)	(838)	(903)
Investment in GSE-UNIS Simulation Technology Co. Ltd.	(469)	(456)	(587)
Acquisitions, net of cash acquired	-	(830)	(549)
	(1,777)	(5,668)	-

Restrictions of cash as collateral under letters of credit			
Release of cash as collateral under letters of credit	4,244	1,717	1,135
Drawdown of cash collateral on Emirates Simulation Academy, LLC line of credit	-	(78)	(294)
Proceeds from sale/leaseback transaction	-	-	377
Net cash used in investing activities	(868)	(6,673)	(1,340)
Cash flows from financing activities:			
Proceeds from issuance of common stock	272	143	176
Treasury stock purchases	(531)	(1,649)	-
Payments of the liability-classified contingent consideration arrangements	(845)	(167)	-
Release of cash for credit facility collateral	-	600	-
Deferred financing costs	-	(24)	(82)
Net cash provided by (used in) financing activities	(1,104)	(1,097)	94
Effect of exchange rate changes on cash	292	(49)	121
Net increase (decrease) in cash and cash equivalents	2,060	(6,251)	1,307
Cash and cash equivalents at beginning of year	20,326	26,577	25,270
Cash and cash equivalents at end of period	$ 22,386	$ 20,326	$ 26,577
Supplemental cash flow disclosures			
Non-cash financing activities			
Issuance of 122,617 shares of common stock to acquire TAS Holdings Ltd.	$ -	$ -	$ 683

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

GSE SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2012, 2011, and 2010

1. Business and Basis of Presentation

GSE Systems, Inc. ("GSE Systems", “GSE” or the "Company") provides training simulators and educational solutions to the energy, process, manufacturing, and government sectors.

The Company’s operations are subject to certain risks and uncertainties including, among others, rapid technological changes, success of the Company’s product development, marketing and distribution strategies, the need to manage growth, the need to retain key personnel and protect intellectual property, and the availability of additional financing on terms acceptable to the Company.

2. Summary of Significant Accounting Policies

Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated.

Accounting estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. On an ongoing basis, the Company evaluates the estimates used, including but not limited to those related to revenue recognition, the allowance for doubtful accounts receivable, estimates of future warranty costs, impairments of goodwill and other intangible assets, valuation of intangible assets acquired and contingent consideration to be paid in business acquisitions, and income taxes. Actual results could differ from these estimates.

Revenue recognition

The majority of the Company’s revenue is derived through the sale of uniquely designed systems containing hardware, software and other materials under fixed-price contracts. In accordance with U.S. generally accepted accounting principles, the revenue under these fixed-price contracts is accounted for on the percentage-of-completion method. This methodology recognizes revenue and earnings as work progresses on the contract and is based on an estimate of the revenue and earnings earned to date, less amounts recognized in prior periods. The Company bases its estimate of the degree of completion of the contract by reviewing the relationship of costs incurred to date to the expected total costs that will be incurred on the project. Estimated contract earnings are reviewed and revised periodically as the work progresses, and the cumulative effect of any change in estimate is recognized in the period in which the change is identified. Estimated losses are charged against earnings in the period such losses are identified. The Company recognizes revenue arising from contract claims either as income or as an offset against a potential loss only when the amount of the claim can be estimated reliably and realization is probable and there is a legal basis of the claim.

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

systems.

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

Revenue from the sale of software licenses 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.

Revenue for contracts with multiple elements is recognized in accordance with ASC 605-25 Revenue Recognition-Multiple Element Arrangements.

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

Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and highly liquid investments with maturities of three months or less at the date of purchase.

The Company had $16.4 million and $8.2 million deposited in an unrestricted money market account with Susquehanna Bank on December 31, 2012 and December 31, 2011, respectively. There were no other cash equivalents.

Contract receivables

Contract receivables include recoverable costs and accrued profit not billed which represents revenue recognized in excess of amounts billed. The liability "Billings in excess of revenue earned" represents billings in excess of revenue recognized.

Billed receivables are recorded at invoiced amounts. The allowance for doubtful accounts is based on historical trends of past due accounts, write-offs, and specific identification and review of past due accounts. The activity in the allowance for doubtful accounts is as follows:

(in thousands)	As of and for the Years ended December 31,		
	2012	2011	2010
Beginning balance	$ 136	$ 2,040	$ 1,746
Current year provision	-	(230)	294
Current year write-offs	(134)	(1,674)	-
Ending balance	$ 2	$ 136	$ 2,040

At a meeting of Emirates Simulation Academy, LLC's ("ESA") three shareholders held at ESA on February 17, 2010, in response to ESA's deteriorating financial condition, the shareholders reached agreement to significantly reduce costs and begin to explore options up to and including the selling of ESA. Accordingly, the Company increased its allowance for doubtful accounts by $1.6 million for the outstanding trade receivable from ESA as of December 31, 2009. In 2011, the trade receivable balance related to ESA was written off.

Equipment, software and leasehold improvements, net

Equipment and purchased software are recorded at cost and depreciated using the straight-line method with estimated useful lives ranging from three to ten years. Leasehold improvements are amortized over the life of the lease or the estimated useful life, whichever is shorter, using the straight-line method. Upon sale or retirement, the cost and related depreciation are eliminated from the respective accounts and any resulting gain or loss is included in operations. Maintenance and repairs are charged to expense as incurred.

Software development costs

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

Development expenditures

Development expenditures incurred to meet customer specifications under contracts are charged to contract costs. Company sponsored development expenditures are either charged to operations as incurred and are included in selling, general and administrative expenses or are capitalized as software development costs. See Note 8, Software development costs. The amounts incurred for Company sponsored development activities relating to the development of new products and services or the improvement of existing products and services, were approximately $2.4 million, $1.8 million, and $1.6 million, for the years ended December 31, 2012, 2011, and 2010, respectively.

Impairment of long-lived assets

Long-lived assets, such as property, plant, and equipment, capitalized computer software costs subject to amortization, and intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized at the amount by which the carrying amount of the asset exceeds the fair value of the asset. Assets to be disposed of would be separately presented in the balance sheet and reported at the lower of the carrying amount or fair value less costs to sell, and would no longer be depreciated.

Goodwill and Intangible Assets

The Company’s intangible assets include amounts recognized in connection with business acquisitions, including customer relationships, contract backlog and software. Intangible assets are initially valued at fair market value using generally accepted valuation methods appropriate for the type of intangible asset. Amortization is recognized on a straight-line basis over the estimated useful life of the intangible assets, except for contract backlog and contractual customer relationships which are recognized in proportion to the related projected revenue streams. Intangible assets with definite lives are reviewed for impairment if indicators of impairment arise. Except for goodwill, the Company does not have any intangible assets with indefinite useful lives.

Goodwill represents the excess of costs over fair value of assets of businesses acquired. The Company reviews its goodwill annually, on November 30, for impairment, or more frequently if events and circumstances indicate that the asset might be impaired. An impairment loss is recognized to the extent that the carrying amount exceeds the asset’s fair value. For goodwill, the impairment determination is made at the reporting unit level and consists of two steps. First, the Company determines the fair value of a reporting unit and compares it to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit’s goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation. The residual fair value after this allocation is the implied fair value of the reporting unit goodwill. No impairment losses were recognized in 2012, 2011 or 2010.

Foreign currency translation

Balance sheet accounts for foreign operations are translated at the exchange rate as of the balance sheet date, and income statement accounts are translated at the average exchange rate for the period. The resulting translation adjustments are included in accumulated other comprehensive income (loss). Transaction gains and losses, resulting from changes in exchange rates, are recorded in operating income in the period in which they occur. For the years ended December 31, 2012, 2011, and 2010, foreign currency transaction gains (losses) were approximately $313,000, $(136,000), and $(297,000), respectively.

Warranty

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

(in thousands)	As of and for the Years ended December 31,		
	2012	2011	2010
Beginning balance	$ 2,300	$ 1,680	$ 1,273
Current year provision	993	987	718
Current year claims	(1,215)	(352)	(330)
Currency adjustment	29	(15)	19
Ending balance	$ 2,107	$ 2,300	$ 1,680

Income taxes

Income taxes are provided under the asset and liability method. Under this method, deferred income taxes are determined based on the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established, when necessary, to reduce deferred tax assets to the amounts expected to be realized. A provision is made for the Company's current liability for federal, state and foreign income taxes and the change in the Company's deferred income tax assets and liabilities.

Stock-based compensation

Compensation expense related to share based awards is recognized on a pro rata straight-line basis based on the value of share awards that are scheduled to vest during the requisite service period. During the twelve months ended December 31, 2012, 2011, and 2010 the Company recognized $914,000, $727,000 and $807,000, respectively, of pre-tax stock-based compensation expense under the fair value method. As of December 31, 2012, the Company had $2.2 million of unrecognized compensation expense related to the unvested portion of outstanding stock option awards expected to be recognized through November 2016.

Income (Loss) per share

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

(in thousands, except for share and per share amounts)

	Years ended December 31,		
	2012	2011	2010
Numerator:			
Net income (loss) attributed to common stockholders	$ 1,174	$ 2,801	$ (2,249)
Denominator:			
Weighted-average shares outstanding for basic earnings per share	18,383,564	18,952,401	18,975,007
Effect of dilutive securities:			
Employee stock options and warrants	74,893	170,502	-
Adjusted weighted-average shares outstanding and assumed conversions for diluted earnings per share	18,458,457	19,122,903	18,975,007
Shares related to dilutive securities excluded because inclusion would be anti-dilutive	2,885,809	1,701,794	1,679,907

Conversion of outstanding stock options and warrants was not assumed for the year ended December 31, 2010 because the impact was anti-dilutive. Included in the shares related to dilutive securities excluded from the diluted earnings per share calculation for the year ended December 31, 2010 were in the money options and warrants totaling 518,546 shares.

Concentration of credit risk

The Company is subject to concentration of credit risk with respect to contract receivables. Credit risk on contract receivables is mitigated by the nature of the Company's worldwide customer base and its credit policies. The Company's customers are not concentrated in any specific geographic region, but are concentrated in the energy industry. The following customers have provided more than 10% of the Company's consolidated contract receivables for the indicated periods.:

	December 31,	
	2012	2011
Slovenské elektrárne, a.s.	17.4%	24.2%
Shandong Nuclear Power Co. Ltd.	13.8%	5.0%

Fair values of financial instruments

The carrying amounts of current assets and current liabilities reported in the consolidated balance sheets approximate fair value due to their short term duration.

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. At each reporting date, the contingent consideration obligation is revalued to estimated fair value and changes in fair value subsequent to the acquisition are reflected in income or expense in the consolidated statements of operations, and could cause a material impact to our operating results. Changes in the fair value of contingent consideration obligations may result from changes in discount periods and rates, changes in the timing and amount of revenue and/or earnings estimates and changes in probability assumptions with respect to the likelihood of achieving the various earn-out criteria.

Deferred financing fees

The Company amortizes the cost incurred to obtain debt financing using the straight-line method over the term of the underlying obligations. The amortization of deferred financing costs is included in interest expense. Deferred financing costs are classified within other assets in the consolidated balance sheets.

Derivative instruments

The Company utilizes forward foreign currency exchange contracts to manage market risks associated with the fluctuations in foreign currency exchange rates. It is the Company's policy to use such derivative financial instruments to protect against market risk arising in the normal course of business 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, 2012, the Company had foreign exchange contracts outstanding of approximately 0.8 million Pounds Sterling, 9.9 million Euro, and 61.8 million Japanese Yen at fixed rates. At December 31, 2011, the Company had foreign exchange contracts outstanding of approximately 3.1 million Pounds Sterling, 12.0 million Euro, and 383.5 million Japanese Yen at fixed rates. The contracts expire on various dates through May 2016. The Company had not designated the foreign exchange contracts as hedges and had recorded the estimated fair value of the contracts in the consolidated balance sheet as follows:

	December 31,	
(in thousands)	2012	2011
Asset derivatives		
Prepaid expenses and other current assets	$ 296	$ 393
Other assets	20	90
	316	483
Liability derivatives		
Other current liabilities	(190)	(258)
Other liabilities	(149)	(56)
	(339)	(314)
Net fair value	$ (23)	$ 169

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

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

For the years ended December 31, 2012, 2011 and 2010, the Company recognized a net loss on its derivative instruments as outlined below:

	Years ended December 31,		
(in thousands)	2012	2011	2010
Foreign exchange contracts- change in fair value	$ (202)	$ 73	$ (745)
Remeasurement of related contract receivables and billings in excess of revenue earned	81	(141)	(168)
	$ (121)	$ (68)	$ (913)

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New accounting standards

In September 2011, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2011-08, Intangibles — Goodwill and Other (Topic 350) — Testing Goodwill for Impairment ("ASU 2011-08"), to allow entities to use a qualitative approach to test goodwill for impairment. ASU 2011-08 permits an entity to first perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If it is concluded this is the case, it is necessary to perform the currently prescribed two-step goodwill impairment test. Otherwise, the two-step goodwill impairment test is not required. ASU 2011-08 is effective for the Company for interim and annual periods ended during 2012, with earlier application permitted. The adoption of this guidance had no impact on the Company's consolidated financial statements.

3. Acquisitions

The following tables summarize the purchase prices and purchase price allocation for the acquisitions completed during the years ended December 31, 2011 and 2010. A description of the acquired businesses during each year is summarized below the table.

	(Dollars in thousands)	
Acquired company	EnVision Systems, Inc.	TAS Holdings Ltd.
Acquisition date	1/4/2011	4/26/2010
Cash purchase price	$ 1,200	$ 1,289
Fair value of contingent consideration	1,998	740
Payable to EnVision Shareholders - contracts receivable	687	-
Working capital retained by EnVision Shareholders - cash	109	-
Total purchase price	$ 3,994	$ 2,029
Purchase price allocation:		
Cash	$ 553	$ 68
Contract receivables	1,124	594
Prepaid expenses and other current assets	62	17
Property and equipment, net	22	496
Intangible assets	1,509	735
Goodwill	1,854	865
Other assets	321	-
Total assets	5,445	2,775
Accounts payable, accrued expenses, and other liabilities	429	703
Billings in excess of revenue earned	46	43
Deferred tax liability	976	-
Total liabilities	1,451	746
Net assets acquired	$ 3,994	$ 2,029

EnVision Systems, Inc.

On January 4, 2011, (the "Closing Date") the Company completed the acquisition of all outstanding common stock of EnVision Systems, Inc. ("EnVision"), acquiring 100% ownership in EnVision. EnVision is headquartered in Madison, NJ and has an Indian subsidiary based in Chennai, India. EnVision's tutorials and simulation models serve the entry-level training market for the oil & gas, refining, and specialty chemicals industries. EnVision operates as a wholly-owned subsidiary of GSE and has been re-named GSE Envision LLC. The purchase price allocation includes $1.5 million of intangible assets, which consists of $438,000 for contractual customer relationships, $433,000 for non-contractual customer relationships, $471,000 for developed technology, $152,000 of in-process research and development and $15,000 related to domain names and other marketing related intangibles. These intangible assets are being amortized over three to eight years. None of the goodwill recorded for financial statement purposes is deductible for tax purposes.

EnVision's results of operations are included in the consolidated financial statements for the period beginning January 4, 2011.

Pro forma results. Our consolidated financial statements include the operating results of EnVision as of the date of acquisition. For the twelve months ended December 31, 2011 and 2010, the unaudited pro forma financial information below assumes that our material business acquisition of EnVision occurred on January 1, 2010.

(in thousands except per share data)	(unaudited) Twelve Months ended December 31,	
Pro forma financial information including the acquisition of EnVision	2011	2010
Revenue	$ 51,126	$ 50,410
Operating income (loss)	2,590	(708)
Net income (loss)	3,163	(1,711)
Earnings (loss) per common share — basic	$ 0.17	$ (0.09)
Earnings (loss) per common share — diluted	$ 0.17	$ (0.09)

TAS Holdings Ltd.

Effective April 26, 2010, GSE Systems Inc., through its wholly owned subsidiary GSE Systems, Ltd. ("GSE UK"), completed the acquisition of TAS Holdings Ltd. ("TAS"), a provider of engineering consulting, specializing in electrical system design, instrumentation and controls engineering and automation engineering. GSE UK acquired 100% of the outstanding common stock of TAS. The purchase price allocation includes $735,000 of intangible assets. These intangible assets included contractual and non-contractual customer relationships, customer backlog, trademarks, domain names, and other marketing related intangibles. These assets are being amortized over an estimated useful life of one to ten years. In 2011, the Company accelerated the amortization related to one of their contractual customer relationships due to the completion of TAS's contract with the customer. The Company recognized approximately $116,000 of additional amortization as a result of this acceleration during 2011. None of the goodwill recorded for financial statement purposes is deductible for tax purposes. TAS' results of operations are included in the consolidated financial statements for the period beginning April 26, 2010.

Contingent Consideration

ASC Topic 805 requires that contingent consideration be recognized at fair value on the acquisition date and be re-measured each reporting period with subsequent adjustments recognized in the consolidated statement of operations. We estimate the fair value of contingent consideration liabilities based on financial projections of the acquired companies and estimated probabilities of achievement and discount the liabilities to present value using a weighted-average cost of capital. Contingent consideration is valued using significant inputs that are not observable in the market which are defined as Level 3 inputs pursuant to fair value measurement accounting. We believe our estimates and assumptions are reasonable, however, there is significant judgment involved. At each reporting date, the contingent consideration obligation is revalued to estimated fair value, and changes in fair value subsequent to the acquisitions are reflected in income or expense in the consolidated statements of operations, and could cause a material impact to, and volatility in, our operating results. Changes in the fair value of contingent consideration obligations may result from changes in discount periods, changes in the timing and amount of revenue and/or earnings estimates and changes in probability assumptions with respect to the likelihood of achieving the various earn-out criteria.

As of December 31, 2012 and 2011, contingent consideration included in the other current liabilities on the consolidated balance sheet totaled $1.6 million and $923,000, respectively. As of December 31, 2012 and 2011, we also had accrued contingent consideration totaling $902,000 and $2.0 million, respectively, which is included in other long-term liabilities on the consolidated balance sheet and represents the portion of contingent consideration estimated to be payable greater than twelve months from the balance sheet date.

4. Goodwill and Intangible Assets

Goodwill

Changes in the carrying amount of goodwill for the years ended December 31, 2012 and 2011 were as follows (in thousands):

Net book value at December 31, 2010	$	2,609
2011 Activity		
Acquisitions		1,854
Foreign currency translation		(1)
Net book value at December 31, 2011		4,462
2012 Activity		
Acquisitions		-
Foreign currency translation		40
Net book value at December 31, 2012	$	4,502

Intangible Assets Subject to Amortization

The following table shows the gross carrying amount and accumulated amortization of definite-lived intangibles related to continuing operations:

(in thousands)	As of December 31, 2012		
	Gross Carrying Amount	Accumulated Amortization	Net
Amortized intangible assets:			
Customer relationships	$ 646	$ (621)	$ 25
Non-contractual customer relationships	911	(453)	458
Developed technology	471	(118)	353
In process research and development	152	(112)	40
Contract backlog	36	(36)	-
Trade names and other	29	(23)	6
Foreign currency translation	37	(8)	29
Total	$ 2,282	$ (1,371)	$ 911

(in thousands)	As of December 31, 2011		
	Gross Carrying Amount	Accumulated Amortization	Net
Amortized intangible assets:			
Customer relationships	$ 646	$ (545)	$ 101
Non-contractual customer relationships	911	(305)	606
Developed technology	471	(59)	412
In process research and development	152	(84)	68
Contract backlog	36	(36)	-
Trade names and other	29	(13)	16
Foreign currency translation	12	(8)	4
Total	$ 2,257	$ (1,050)	$ 1,207

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 is recognized in proportion to the related projected revenue streams. In 2011, the Company accelerated the amortization expense related to one of TAS' customer relationships due to the completion of TAS' contract with the customer. The acceleration resulted in an additional $116,000 of amortization expense in 2011. The Company reviews specific definite-lived intangibles for impairment when events occur that may impact their value in accordance with the respective accounting guidance for long-lived assets. There were no impairment charges recorded for the years ended December 31, 2012, 2011, and 2010.

Amortization expense related to definite-lived intangible assets totaled $313,000 $948,000 and $102,000 for the years ended December 31, 2012, 2011, and 2010, respectively. The following table shows the estimated amortization expense of the definite-lived intangible assets for the next five years and thereafter:

(in thousands)	
Fiscal year ending:	
2013	$ 209
2014	142
2015	130
2016	123
2017	120
Thereafter	187
	$ 911

5. Contract Receivables

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

(in thousands)	December 31,	
	2012	2011
Billed receivables	$ 12,403	$ 8,258
Recoverable costs and accrued profit not billed	11,315	12,234
Allowance for doubtful accounts	(2)	(136)
Total contract receivables, net	$ 23,716	$ 20,356

6. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

(in thousands)	December 31,	
	2012	2011
Prepaid expenses	$ 608	$ 671
Deferred income taxes- current	119	127
Value added tax receivable	128	-
Unrestricted certificates of deposit	846	1,768
Other current assets	1,511	1,167
Total	$ 3,212	$ 3,733

7. Equipment, Software and Leasehold Improvements

Equipment, software and leasehold improvements consist of the following:

(in thousands)	December 31,	
	2012	2011
Computer equipment	$ 3,246	$ 3,649
Software	1,266	186
Leasehold improvements	369	181
Furniture and fixtures	1,852	1,190
	6,733	5,206
Accumulated depreciation	(4,653)	(4,105)
Equipment, software and leasehold improvements, net	$ 2,080	$ 1,101

Depreciation expense was $562,000, $497,000, and $579,000 for the years ended December 31, 2012, 2011, and 2010, respectively. During 2012, the Company implemented a new Enterprise Resource Planning (ERP) system across our global operations. The Company capitalized $1.1 million of costs related to this project during the year ended December 31, 2012 and placed the ERP system into service in October 2012.

8. Software Development Costs

Software development costs, net, consist of the following:

(in thousands)	December 31,	
	2012	2011
Capitalized software development costs	$ 3,641	$ 3,226
Accumulated amortization	(1,215)	(1,411)
Software development costs, net	$ 2,426	$ 1,815

Software development costs capitalized were $1.3 million, $838,000, and $903,000 for the years ended December 31, 2012, 2011, and 2010, respectively. Amortization of software development costs capitalized was $704,000, $813,000, and $978,000, for the years ended December 31, 2012, 2011, and 2010, respectively, and was included in cost of revenue.

9. Fair Value of Financial Instruments

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

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

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

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

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

The Company considers the recorded value of certain of its financial assets and liabilities, which consist primarily of cash and cash equivalents, accounts receivable and accounts payable, to approximate the fair value of the respective assets and liabilities at December 31, 2012 and December 31, 2011 based upon the short-term nature of the assets and liabilities.

The Company had $16.4 million and $8.2 million deposited in an unrestricted money market account with Susquehanna Bank on December 31, 2012 and December 31, 2011, respectively.

As of December 31, 2012, the Company was contingently liable for fourteen standby letters of credit and five surety bonds totaling $6.0 million which represent bid and performance bonds on fifteen contracts. The Company has deposited the full value of six standby letters of credit, $1.8 million, into money market escrow accounts and certificates of deposit 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 balance sheet at December 31, 2012 as restricted cash and long-term restricted cash depending on the expiration date of the underlying letters of credit. An additional seven letters of credit for $3.1 million have been collateralized using the Company's line of credit at December 31, 2012.

The following table presents assets and liabilities measured at fair value at December 31, 2012:

(in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Money market fund	$ 18,082	$ -	$ -	18,082
Certificates of deposit	890	-	-	890
Foreign exchange contracts	-	316	-	316
Total assets	$ 18,972	$ 316	$ -	$ 19,288
Foreign exchange contracts	$ -	$ (339)	$ -	$ (339)
Total liabilities	$ -	$ (339)	$ -	$ (339)

The following table presents assets and liabilities measured at fair value at December 31, 2011:

(in thousands)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Money market fund	$ 8,163	$ -	$ -	8,163
Certificates of deposit	5,976	-	-	5,976
Foreign exchange contracts	-	483	-	483
Total assets	$ 14,139	$ 483	$ -	$ 14,622
Foreign exchange contracts	$ -	$ (314)	$ -	$ (314)
Total liabilities	$ -	$ (314)	$ -	$ (314)

For the years ended December 31, 2012 and 2011, the Company did not have any transfers between fair value Level 1 and Level 2.

10. Long-Term Debt

At December 31, 2012 and 2011, the Company had no long-term debt.

Line of Credit

At December 31, 2012, the Company had a Master Loan and Security Agreement and Revolving Credit Note with Susquehanna Bank ("Susquehanna"). The Company and its subsidiaries, GSE Power Systems, Inc., and GSE EnVision LLC, were 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 two-year agreement is to expire on November 1, 2013.

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, inventory, proceeds and products, intangibles, trademarks, patents, intellectual property, machinery and equipment.

Initially, all (i) issuances of stand-by letters of credit and (ii) advances of working capital (collectively referred to as the "Advances") required that the Company maintain cash balances (the "Cash Balance Requirement") at the Bank in an amount equal to the Advances, with a minimum of $3.0 million at all times. The Cash Balance Requirement was to be reduced to the minimum amount if the Company's consolidated net income after taxes (exclusive of (a) gains and losses on derivatives and (b) stock option expense), as defined ("Net Income"), was positive for the year ending December 31, 2011. Thereafter, the Cash Balance Requirement will remain at the minimum amount as long as the Company's quarterly Net Income commencing for the quarter ending March 31, 2012, remains positive and the Company is in compliance with the covenants. If the Company's quarterly Net Income is negative or the Company is not in compliance with the covenants, the Cash Balance Requirement will revert to the amount of the Advances until the Company attains positive Net Income for two consecutive quarters. The credit agreements contained certain restrictive covenants regarding future acquisitions and incurrence of debt. In addition, the credit agreements contained financial covenants with respect to the Company's cash flow coverage ratio, minimum tangible capital base, quick ratio, and tangible capital base ratio. At December 31, 2012, the Company had not paid any interest or principal payments related to any borrowings for over one year. As such the cash flow coverage ratio is not applicable at December 31, 2012.

	Covenant	As of December 31, 2012
Minimum tangible capital base	Must Exceed $26.0 million	$33.0 million
Quick ratio	Must Exceed 2.00 : 1.00	2.47 : 1.00
Tangible capital base ratio	Not to Exceed .75 : 1.00	.66 : 1.00

For the quarter ended December 31, 2012 the Company's Net Income, as defined above, was positive. As such, the Company will currently be required to maintain cash balances of $3.0 million at Susquehanna. At December 31, 2012, the Company had $3.1 million in Advances, all of which consisted of outstanding stand-by letters of credit.

11. Income Taxes

The consolidated income (loss) before income taxes, by domestic and foreign sources, is as follows:

(in thousands)	Years ended December 31,		
	2012	2011	2010
Domestic	$ 127	$ 1,204	$ (3,114)
Foreign	1,736	1,159	1,071
Total	$ 1,863	$ 2,363	$ (2,043)

The provision for income taxes is as follows:

(in thousands)	Years ended December 31,		
	2012	2011	2010
Current:			
Federal	$ 22	$ 62	$ -
State	19	181	9
Foreign	562	462	233
Subtotal	603	705	242
Deferred:			
Federal	-	(1,002)	-
Foreign	86	(141)	(36)
Subtotal	86	(1,143)	(36)
Total	$ 689	$ (438)	$ 206

The Company is entitled to a deduction for federal and state tax purposes with respect to employees' stock option activity. As of December 31, 2012, the Company had $5.7 million of unrecognized excess tax deductions related to compensation for stock option exercises which will be recognized when the net operating loss carryforwards are fully utilized and those excess tax benefits result in a reduction to income taxes payable.

The effective income tax rate differed from the statutory federal income tax rate due to the following:

	Effective Tax Rate Percentage (%) Years ended December 31,		
	2012	2011	2010
Statutory federal income tax rate	34.0%	34.0%	34.0%
State income taxes, net of federal tax benefit	0.7	5.0	(0.5)
Effect of foreign operations	(9.5)	(12.0)	(4.6)
Change in valuation allowance	(13.4)	(68.3)	(38.8)
Other, principally permanent differences	25.2	22.8	(0.2)
Effective tax rate	37.0%	(18.5)%	(10.1)%

Deferred income taxes arise from temporary differences between the tax bases of assets and liabilities and their reported amounts in the financial statements. A summary of the tax effect of the significant components of the deferred income tax assets (liabilities) is as follows:

Deferred tax components:

(in thousands)	December 31,		
	2012	2011	2010
Deferred tax assets:			
Net operating loss carryforwards	$4,352	$4,850	$5,893
Capital loss carryforwards	2,446	2,351	2,472
Accruals and reserves	145	135	126
Expenses not currently deductible for tax purposes	1,353	1,494	1,358
Alternative minimum tax credit carryforwards	166	166	166
Other	1,568	1,449	1,163
Total deferred tax asset	10,030	10,445	11,178
Valuation allowance	(7,026)	(6,869)	(8,662)
Total deferred tax asset less valuation allowance	3,004	3,576	2,516
Deferred tax liabilities:			
Undistributed earnings of foreign subsidiary	(1,473)	(1,950)	(1,790)
Software development costs	(934)	(690)	(677)
Other	(910)	(1,145)	(421)
Total deferred tax liability	(3,317)	(3,785)	(2,888)
Net deferred tax liability	$(313)	$(209)	$(372)

In assessing the realizability of deferred tax assets, 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 income in making this assessment.

Management believes that the Company will achieve profitable operations in future years that will enable the Company to recover the benefit of its deferred tax assets. However, other than for a portion of the deferred tax assets that are related to the Company's Indian and Chinese subsidiaries, the Company presently does not have sufficient objective evidence to substantiate the recovery of the deferred tax assets. Accordingly, the Company has established a full $7.0 million valuation allowance on its U.S. deferred tax assets at December 31, 2012. The valuation allowance for deferred tax assets increased by $1.1 million in 2012, decreased by $1.8 million in 2011 and increased by $287,000 in 2010.

At December 31, 2012, the Company's largest deferred tax asset of $4.4 million primarily relates to a U.S. net operating loss carryforward of $12.0 million which expires in various amounts between 2017 and 2030. 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.

Uncertain Tax Positions

The Company, through its acquisition of EnVision on January 4, 2011, recorded $320,000 of unrecognized tax benefits as well as a receivable from the EnVision shareholders for the same amount as indemnity for this tax position. During 2012, the Company partially reduced both the liability and receivable from the EnVision acquisition by $269,000 as the related period is now outside the applicable statute of limitations. During 2011 and 2012, the Company also recorded $126,000 and $165,000 of unrecognized tax benefits for certain foreign tax contingencies, respectively. The Company made payments of $0 and $8,000 during 2011 and 2012, respectively, related to these foreign tax contingencies. The Company records these uncertain tax positions in other current liabilities on the consolidated balance sheet, and records the associated interest and penalties as a component of income tax expense. During 2011 and 2012, the Company accrued $10,000 and $4,000 of interest and penalties, respectively.

Intraperiod tax allocation

The Company utilizes the with-and-without intraperiod tax allocation approach as described in ASC 740-24-45-7 which results in the use of the windfall tax benefits being utilized last.

12. Capital Stock

The Company's Board of Directors has authorized 32,000,000 total shares of capital stock, of which 30,000,000 are designated as common stock and 2,000,000 are designated as preferred stock. The Board of Directors has the authority to establish one or more classes of preferred stock and to determine, within any class of preferred stock, the preferences, rights and other terms of such class.

As of December 31, 2012, the Company has reserved 3,907,686 shares of common stock for issuance: 3,070,803 shares upon exercise of outstanding stock options; and 836,883 shares for future grants under the Company's 1995 Long-Term Incentive Plan.

Share Repurchase Plan

On March 21, 2011, the Board of Directors authorized the purchase of up to $3.0 million of the Company's common stock in accordance with the safe harbor provisions of Rule 10b-18 of the Securities Exchange Act of 1934. During the year ended December 31, 2011, the Company repurchased 824,374 shares at an aggregate cost of $1.6 million. During the year ended December 31, 2012, the Company repurchased 280,113 shares at an aggregate cost of $531,000.

Preferred Stock Rights

On March 21, 2011, the Board of Directors of the Company declared a dividend, payable to holders of record as of the close of business on April 1, 2011, of one preferred stock purchase right (a "Right") for each outstanding share of common stock, par value $0.01 per share, of the Company (the "Common Stock"). In addition, the Company will issue one Right with each new share of Common Stock issued. In connection therewith, on March 21, 2011, the Company entered into a Stockholder Protection Rights Agreement (as amended from time to time, the Rights Agreement) with Continental Stock Transfer & Trust Company, as Rights Agent, which has a term of three years, unless amended by the Board of Directors in accordance with the terms of the Rights Agreement. Upon approval of both an independent committee of the Board of Directors and the Board of Directors, the Rights Plan can be extended for up to three years. The Rights will initially trade with and be inseparable from the Common Stock and will not be evidenced by separate certificates unless they become exercisable. Each Right entitles its holder to purchase from the Company one-hundredth of a share of participating preferred stock having economic and voting terms similar to the Common Stock at an exercise price of $8.00 per Right, subject to adjustment in accordance with the terms of the Rights Agreement, once the Rights become exercisable. Under the Rights Agreement, the Rights become exercisable if any person or group acquires 20% or more of the Common Stock or, in the case of any person or group that owned 20% or more of the Common Stock as of March 21, 2011, upon the acquisition of any additional shares by such person or group. The Company, its subsidiaries, employee benefit plans of the Company or any of its subsidiaries and any entity holding Common Stock for or pursuant to the terms of any such plan are accepted. Upon exercise of the Right in accordance with the Rights Agreement, the holder would be able to purchase a number of shares of Common Stock from the Company having an aggregate market price (as defined in the Rights Agreement) equal to twice the then-current exercise price for an amount in cash equal to the then-current exercise price. In addition, the Company may, in certain circumstances and pursuant to the terms of the Rights Agreement, exchange the Rights for one share of Common Stock or an equivalent security for each Right or, alternatively, redeem the Rights for $0.001 per Right. The Rights will not prevent a takeover of our Company, but may cause substantial dilution to a person that acquires 20% or more of the Company's Common Stock.

13. Stock-Based Compensation

Long-term incentive plan

During 1995, the Company established the 1995 Long-Term Incentive Stock Option Plan (the "Plan"), which permits the granting of stock options (including incentive stock options and nonqualified stock options) stock appreciation rights, restricted or unrestricted stock awards, phantom stock, performance awards or any combination of these to employees, directors or consultants. Options to purchase shares of the Company's common stock under the Plan expire in either seven or ten years from the date of grant and become exercisable in three, five, or seven installments with a certain percentage of options vesting on the first anniversary of the grant date and additional options vesting on each of the subsequent anniversaries of the grant date, subject to acceleration under certain circumstances. The Plan expires on June 30, 2018; the total number of shares that could be issued under the Plan is 5,500,000. As of December 31, 2012, 3,070,803 stock options were outstanding under the Plan, while 836,883 stock options remained to be granted under the Plan.

The Company recognizes compensation expense on a pro rata straight-line basis over the requisite service period for stock-based compensation awards with both graded and cliff vesting terms. The Company recognizes the cumulative effect of a change in the number of awards expected to vest in compensation expense in the period of change. The Company has not capitalized any portion of its stock-based compensation.

During the years ended December 31, 2012, 2011, and 2010, the Company recognized $914,000, $727,000 and $807,000, respectively, of pre-tax stock-based compensation expense under the fair value method.

Stock option and warrant activity

During the year ended December 31, 2012, the Company granted stock options to purchase 212,870 shares of common stock to GSE directors, officers, and employees. No warrants to purchase shares of common stock were issued in 2012. During the year ended December 31, 2011, the Company granted stock options to purchase 1,463,000 shares of common stock to GSE directors, officers, and employers. No warrants to purchase shares of common stock were issued in 2011.

Information with respect to stock option and warrant activity as of and for the year ended December 31, 2012 is as follows:

	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value (in thousands)	Weighted Average Remaining Contractual Life (Years)
Shares under option and warrant, December 31, 2011	3,479,450	$ 3.46		
Options granted	212,870	2.26		
Options exercised	(266,211)	1.63		
Options forfeited	(216,439)	3.73		
Warrants expired	(138,867)	6.00		
Shares under option December 31, 2012	3,070,803	3.40	$ 534	4.85
Options expected to vest	1,750,107	2.75	$ 358	5.43
Options exercisable at December 31, 2012	1,320,696	$ 4.27`	$ 176	4.08

A summary of the status of the Company's nonvested options as of and for the year ended December 31, 2012 is presented below. All outstanding warrants were vested prior to 2012.

	Number of Shares	Weighted Average Fair Value
Nonvested options at December 31, 2011	2,040,690	$ 1.57
Options granted	212,870	0.93
Options vested during the period	(503,453)	1.76
Nonvested options at December 31, 2012	1,750,107	$ 1.43

The fair value of the options granted in 2012, 2011 and 2010 were estimated on the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Years ended December 31,		
	2012	2011	2010
Risk-free interest rates	.34 - 1.16%	1.06 - 2.28%	.57% - 2.93%
Dividend yield	0%	0%	0%
Expected life	2.00 - 6.28 years	3.75 - 6.98 years	2.5 - 6.5 years
Volatility	52.13 - 57.85%	49.49 - 60.24%	37.2 - 63.8%
Weighted average volatility	53.85%	55.04%	55.38%

As of December 31, 2012, the Company had $2.2 million of unrecognized compensation expense related to the unvested portion of outstanding stock options expected to be recognized on a pro-rata straight line basis over a weighted average remaining service period of approximately 6.5 years.

The Company received cash for the exercise price associated with stock options exercised of $272,000, $133,000, and $97,000 during the years ended December 31, 2012, 2011, and 2010, respectively. The total intrinsic value realized by participants on stock options exercised was $94,000, $103,000 and $159,000 during the years ended December 31, 2012, 2011, and 2010, respectively.

14. Commitments and Contingencies

Leases

The Company is obligated under certain noncancelable operating leases for office facilities and equipment. Future minimum lease payments under noncancelable operating leases as of December 31, 2012 are as follows:

(in thousands)	Gross Future Minimum Lease Payments
2013	$ 979
2014	653
2015	657
2016	763
2017	772
Thereafter	646
Total	$ 4,470

Total rent expense under operating leases for the years ended December 31, 2012, 2011, and 2010 was approximately $1.0 million, $1.1 million, and $942,000, respectively.

Standby Letters of credit, bank guarantees, surety bonds and performance bonds

As of December 31, 2012, the Company was contingently liable for fourteen standby letters of credit and five surety bonds totaling $6.0 million which represent bid and performance bonds on fifteen contracts. The Company has deposited the full value of six standby letters of credit, $1.8 million, into money market escrow accounts and certificates of deposit 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 balance sheet at December 31, 2012 as restricted cash and long-term restricted cash depending on the expiration date of the underlying letters of credit. An additional seven letters of credit for $3.1 million have been collateralized using the Company's line of credit at December 31, 2012.

Contingencies

Various actions and proceedings are presently pending to which the Company is a party. In the opinion of management, the aggregate liabilities, if any, arising from such actions are not expected to have a material adverse effect on the financial position, results of operations or cash flows of the Company.

15. Employee Benefits

The Company has a qualified defined contribution plan that covers substantially all U.S. employees under Section 401(k) of the Internal Revenue Code. Under this plan, the Company's stipulated basic contribution matches a portion of the participants' contributions based upon a defined schedule. The Company's contributions to the plan were approximately $287,000, $271,000, and $245,000 for the years ended December 31, 2012, 2011, and 2010, respectively.

16. Segment Information

The Company has one reportable business segment that provides simulation solutions and services to the nuclear and fossil fuel power industry, and to the chemical and petrochemical industries. Contracts typically range from 10 months to three years.

For the years ended December 31, 2012, 2011, and 2010, 59%, 67%, and 72%, respectively, of the Company's consolidated revenue was from customers in the nuclear power industry. The Company designs, develops and delivers business and technology solutions to the energy industry worldwide. Revenue, operating income (loss) and total assets for the Company's United States, European, and Asian subsidiaries as of and for the years ended December 31, 2012, 2011, and 2010 are as follows:

(in thousands)	Year ended December 31, 2012				
	United States	Europe	Asia	Eliminations	Consolidated
Contract revenue	$36,222	$15,005	$1,019	$ -	$ 52,246
Transfers between geographic locations	2,226	494	661	(3,381)	-
Total contract revenue	$38,448	$15,499	$1,680	$ (3,381)	$ 52,246
Operating income	$585	$1,285	$127	$ -	$ 1,997
Total assets, at December 31	$81,792	$15,543	$1,640	$ (36,411)	$ 62,564

(in thousands)	Year ended December 31, 2011				
	United States	Europe	Asia	Eliminations	Consolidated
Contract revenue	$37,587	$12,443	$1,096	$ -	$ 51,126
Transfers between geographic locations	1,379	-	416	(1,795)	-
Total contract revenue	$38,966	$12,443	$1,512	$ (1,795)	$ 51,126
Operating income	$745	$1,293	$190	$ -	$ 2,228
Total assets, at December 31	$78,900	$13,429	$1,002	$ (34,516)	$ 58,815

(in thousands)	Year ended December 31, 2010				
	United States	Europe	Asia	Eliminations	Consolidated
Contract revenue	$37,197	$9,699	$317	$ -	$ 47,213
Transfers between geographic locations	352	-	798	(1,150)	-
Total contract revenue	$37,549	$9,699	$1,115	$ (1,150)	$ 47,213
Operating income (loss)	$(2,397)	$1,157	$8	$ -	$ (1,232)
Total assets, at December 31	$70,783	$12,689	$353	$ (30,211)	$ 53,614

Approximately 70%, 66%, and 71% of the Company's 2012, 2011, and 2010 revenue, respectively, was derived from international sales of its products and services from all of its subsidiaries.

17. Supplemental Disclosure of Cash Flow Information

(in thousands)	Year ended December 31,		
	2012	2011	2010
Cash paid:			
Interest	$-	$-	$-
Income taxes	$1,094	$813	$545

18. Quarterly Financial Data (Unaudited)

The Company's quarterly financial information has not been audited but, in management's opinion, includes all adjustments necessary for a fair presentation.

(in thousands, except per share data)

	Year ended December 31, 2012 Quarterly Data			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Contract revenue	$13,389	$13,183	$13,009	$12,665
Operating income (loss)	218	560	1,356	(137)
Net income (loss)	530	158	816	(330)
Basic income (loss) per common share	$0.03	$0.01	$0.04	$(0.02)
Diluted income (loss) per common share	$0.03	$0.01	$0.04	$(0.02)

	Year ended December 31, 2011 Quarterly Data			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Contract revenue	$12,322	$11,257	$12,549	$14,998
Operating income (loss)	(287)	248	975	1,292
Net income (loss)	1,013	(244)	858	1,174
Basic income (loss) per common share	$0.05	$(0.01)	$0.05	$0.06
Diluted income (loss) per common share	$0.05	$(0.01)	$0.05	$0.06

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

ITEM 9A. CONTROLS AND PROCEDURES.

(a) Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed by it in its reports filed or submitted pursuant to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that information required to be disclosed by the Company in its Exchange Act reports is accumulated and communicated to management, including the Company's Chief Executive Officer ("CEO"), who is its principal executive officer, and Chief Financial Officer ("CFO"), who is its principal financial officer, to allow timely decisions regarding required disclosure. At the end of the period covered by this report, an evaluation was performed under the supervision and with the participation of our management including our CEO and our CFO, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13-15(e) of the Exchange Act. Based on the evaluation of our disclosure controls and procedures as of December 31, 2012, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were not effective because of the material weakness identified below.

(b) Management's Annual Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP. The effectiveness of any system of internal control over financial reporting is subject to inherent limitations, including the exercise of judgment in designing, implementing, operating and evaluating the controls and procedures. Because of these inherent limitations, internal control over financial reporting cannot provide absolute assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. GAAP and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that internal controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A "material weakness" as defined by Public Company Accounting Oversight Board ("PCAOB") Auditing Standard No. 5, "An Audit of Internal Control over Financial Reporting That is Integrated with an Audit of Financial Statements" ("Auditing Standard No. 5") is "a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis." A "deficiency" in internal control over financial reporting as defined by Auditing Standard No. 5 "exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis." We believe that the following is a material weakness in our internal control over financial reporting.

In 2012, the Company implemented a new system for financial reporting and accumulation of financial data. The new financial system is a significant component of the Company's internal control over financial reporting, but was not adopted in response to any deficiency in our internal controls. As of December 31, 2012, we had not completed the

evaluation of the completeness, design and operating effectiveness of the internal controls over the new financial system. As a result of this material weakness in our internal control over financial reporting, we performed additional review and analysis over our consolidated financial statements for the year ended December 31, 2012. As a result of these procedures, we believe that our consolidated financial statements are presented in accordance with U.S. GAAP.

Because of the material weakness described above, management has concluded that we did not maintain effective internal control over financial reporting as of December 31, 2012, based on the "Internal Control – Integrated Framework" issued by COSO. However, we believe these additional procedures were sufficient to provide a basis for management's certifying that the financial statements presented in this Report are presented fairly, in all material respects, in accordance with U.S. GAAP.

(c) Changes in Internal Control over Financial Reporting

Other than the implementation of the new financial system described above, no changes in the Company's internal control over financial reporting (as defined in Exchange Act Rule 13a-15) occurred during the year ended December 31, 2012 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

(d) Limitation of Effectiveness of Controls

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

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this item, including items 401, 405, 406 and 407 of Regulation S-K, is incorporated by reference to the section captioned "Directors and Executive Officers" in the definitive Proxy Statement for the Company's 2013 Annual Meeting of Shareholders and incorporated herein by reference or will be provided in an amendment to this Annual Report on Form 10-K.

The Company has adopted a Conduct of Business Policy that applies to its directors, officers and employees, including its principal executive officer, and principal financial officer. The Conduct of Business Policy is available on the Company's website at www.gses.com. In addition, the Company has adopted a Code of Ethics for its principal executive officer and senior financial officers which is also available on the Company's website. The Company will post on its website information about any amendment to, or waiver from, any provision of the Code of Ethics that applies to its principal executive officer, principal financial officer, or principal accounting officer.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this item will either be set forth under the “Executive Compensation” section in the definitive Proxy Statement for the 2013 Annual Meeting of Shareholders and incorporated herein by reference or will be provided in an amendment to this Annual Report on Form 10-K.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this item will be either set forth under the sections captioned “Voting Securities and Principal Holders Thereof,” and “Executive Compensation” in the definitive Proxy Statement for the 2013 Annual Meeting of Shareholders and incorporated herein by reference or will be provided in an amendment to this Annual Report on Form 10-K.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE.

The information required by this item will be either set forth under the “Directors and Executive Officers” section in the definitive Proxy Statement for the 2013 Annual Meeting of Shareholders and incorporated herein by reference or will be provided in an amendment to this Annual Report on Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The information required by this item will be either set forth under the “Audit Committee Pre-Approval of Audit and Non-Audit Services” section in the definitive Proxy Statement for the 2013 Annual Meeting of Shareholders and incorporated herein by reference or will be provided in an amendment to this Annual Report on Form 10-K.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) List of Financial Statements

The following financial statements are included in Item 8:

GSE Systems, Inc. and Subsidiaries

Report of Independent Registered Public Accounting Firm – Consolidated Financial Statements
Consolidated Balance Sheets as of December 31, 2012 and 2011
Consolidated Statements of Operations for the years ended December 31, 2012, 2011, and 2010
Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2012, 2011, and 2010
Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2012, 2011, and 2010
Consolidated Statements of Cash Flows for the years ended December 31, 2012, 2011, and 2010
Notes to Consolidated Financial Statements

(a) (2) List of Schedules

All other schedules to the consolidated financial statements are omitted as the required information is either inapplicable or presented in the consolidated financial statements or related notes.

(a) (3) List of Exhibits

The Exhibits which are filed with this report or which are incorporated by reference are set forth in the Exhibit Index hereto.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GSE Systems, Inc.
By: / s / James A. Eberle
James A. Eberle
Chief Executive Officer

Pursuant to the requirements of the Securities Act, this report has been signed by the following persons in the capacities and on the dates indicated.

Date: March 11, 2013	/s / JAMES A. EBERLE James A. Eberle, Chief Executive Officer (Principal Executive Officer)
Date: March 11, 2013	/ s / JEFFERY G. HOUGH Jeffery G. Hough, Senior Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)

Date: March 11, 2013	(Jerome I. Feldman, Chairman of the Board	)	By: / s / JEFFERY G. HOUGH
	(Dr. Sheldon L. Glashow, Director	)	Jeffery G. Hough
	(Jane Bryant Quinn, Director	)	Attorney-in-Fact
	(Dr. Roger Hagengruber, Director	)	
	(Joseph W. Lewis, Director	)	
	(Christopher Sorrells, Director	)	
	(Orrie Lee Tawes III, Director	)	

A Power of Attorney, dated March 6, 2013 authorizing Jeffery G. Hough to sign this Annual Report on Form 10-K for the fiscal year ended December 31, 2012 on behalf of certain of the directors of the Registrant is filed as Exhibit 24.1 to this Annual Report.

Exhibit	Description of Exhibit
2.	Plan of acquisition, reorganization, arrangement, liquidation, or succession
2.1	Share Purchase Agreement relating to TAS Holdings, Ltd. dated April 26, 2010, by and between John Maplesden, Anthony Maplesden, and John Easton and GSE Systems, Ltd and GSE Systems, Inc. previously filed with Form 8-K as filed with the Securities and Exchange Commission on April 30, 2010 and incorporated herein by reference.
2.2	Contract for the Sale and Leaseback of Land and Buildings at 37-39 Norton Road, Stockton-on-Tees TS18 2BU between TAS Holdings Ltd. and John Maplesden, Anthony Maplesden and John Easton, dated April 26, 2010, previously filed with Form 8-K as filed with the Securities and Exchange Commission on April 30, 2010 and incorporated herein by reference.
2.3	Stock Purchase Agreement, dated as of January 1, 2011 among GSE Systems, Inc., Toshi Shinohara, Santosh Joshi, Hideo Shinohara, and EnVision Systems, Inc. Previously filed with Form 8-K as filed with the Securities and Exchange Commission on January 10, 2011 and incorporated herein by refernece.
2.4	Employment Agreement, dated as of January 1, 2011 between Santosh Joshi and EnVision Systems, Inc. Previously filed with Form 8-K as filed with the Securities and Exchange Commission on January 10, 2011 and incorporated herein by reference.
3.	Articles of Incorporation and Bylaws
3(i)	Fourth Amended and Restated Certificate of Incorporation of the Company. Previously filed in connection with the GSE Systems, Inc. Form DEF 14A as filed with the Securities and Exchange Commission on November 20, 2007 and incorporated herein by reference.
3(ii)	Amended and Restated Bylaws of the Company. Previously filed in connection with Form DEF 4A as filed with the Securities and Exchange Commission on November 20, 2007 and incorporated herein by reference.

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4. Instruments Defining Rights of Security Holders, including Indenture.

4.1 Specimen Common Stock Certificate of the Company. Previously filed in connection with Amendment No. 3 to the GSE Systems, Inc. Form S-1 Registration Statement as filed with the Securities and Exchange Commission on July 24, 1995 and incorporated herein by reference.

10. Material Contracts

10.1 Agreement among ManTech International Corporation, National Patent Development Corporation, GPS Technologies, Inc., General Physics Corporation, Vattenfall Engineering AB and GSE Systems, Inc. (dated as of April 13, 1994). Previously filed in connection with the GSE Systems, Inc. Form S-1 Registration Statement as filed with the Securities and Exchange Commission on April 24, 1995 and incorporated herein by reference.

10.2 GSE Systems, Inc. 1995 Long-Term Incentive Plan, amended as of September 25, 2007. Previously filed in connection with the GSE Systems, Inc. Form DEF 14A as filed with the Securities and Exchange Commission on November 20, 2007 and incorporated herein by reference. *

10.3 Form of Option Agreement Under the GSE Systems, Inc. 1995 Long-Term Incentive Plan. Previously filed in connection with the GSE Systems, Inc. Form 10-K as filed with the Securities and Exchange Commission on March 22, 1996 and incorporated herein by reference. *

10.4 Memorandum of Association of Limited Liability Company dated November 8, 2005 by and between Al Qudra Holding PJSC, Centre of Excellence for Applied Research and Training, and GSE Systems, Inc. Previously filed in connection with the GSE Systems, Inc. Form 10-Q/A filed with the Securities and Exchange Commission on October 4, 2006 and incorporated herein by reference.

10.5 Supply Agreement Contract by and between Emirates Simulation Academy, LLC and GSE Power Systems, Inc. dated January 3, 2006. Previously filed in connection with the GSE Systems, Inc. Form 10-Q/A filed with the Securities and Exchange Commission on October 4, 2006 and incorporated herein by reference.

10.6 License and Technology Transfer Agreement by and Between GSE Power Systems, Inc. and Emirates Simulation Academy, LLC dated January 3, 2006. Previously filed in connection with the GSE Systems, Inc. Form 10-Q/A filed with the Securities and Exchange Commission on October 4, 2006 and incorporated herein by reference.

10.7 Office Lease Agreement between 1332 Londontown, LLC and GSE Systems, Inc. (dated as of February 27, 2008). Previously filed in connection with the GSE Systems, Inc. Form 8-K as filed with the Securities and Exchange Commission on March 11, 2008 and incorporated herein by reference.

10.8 Consulting Agreement, dated as of April 30, 2010 between John V. Moran and GSE Systems, Inc. Previously filed in connection with the GSE Systems, Inc. Form 8-K as filed with the Securities and Exchange Commission on April 30, 2010 and incorporated herein by reference.

10.9 Employment Agreement dated as of November 1, 2010 between GSE Systems, Inc. and James Eberle. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on November 1, 2010 and incorporated herein by reference.*

10.10 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Chin-our Jerry Jen. Previously filed in connection with the GSE Systems, Inc. Form 8-K as filed with the Securities and Exchange Commission on February 2, 2011 and incorporated herein by reference.

10.11 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Jeffery G. Hough. Previously filed in connection with the GSE Systems, Inc. Form 8-K as filed with the Securities and Exchange Commission on February 2, 2011 and incorporated herein by reference.

10.12 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Michael D. Feldman. filed herewith

10.13 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Gill Grady. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on February 11, 2011 and incorporated herein by reference.*

10.14 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Lawrence Gordon, filed herewith

10.15 Employment Agreement dated as of January 1, 2011 between GSE Systems, Inc. and Jerome I. Feldman. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on February 2, 2011 and incorporated herein by reference

10.16 Employment Agreement dated as of October 12, 2011 between GSE Systems, Inc. and Phillip M. Polefrone. Previously filed in connection with the GSE Systems, Inc. Form 10-Q filed with the Securities and Exchange Commission on November 9, 2011 and incorporated herein by reference. *

10.17 Master Loan and Security Agreement dated November 22, 2011, by and among GSE Systems, Inc., GSE EnVision Inc. and Susquehanna Bank. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on November 29, 2011 and incorporated herein by reference.

10.18 $7,500,000 Revolving Credit Note, dated November 22, 2011 incorporated herein by reference. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on November 29, 2011 and incorporated herein by reference.

10.19 Employment Agreement dated as of December 27, 2012 between GSE Systems, Inc. and Steven Freel. Previously filed in connection with the GSE Systems, Inc. Form 8-K filed with the Securities and Exchange Commission on December 27, 2012 and incorporated herein by reference. *

14. Code of Ethics

14.1 Code of Ethics for the Principal Executive Officer and Senior Financial Officers. Previously filed in connection with the GSE Systems, Inc. Form 10-K filed with the Securities and Exchange Commission on March 31, 2006 and incorporated herein by reference.

21. Subsidiaries.

21.1 List of Subsidiaries of Registrant at December 31, 2011, filed herewith.

23. Consents of Experts and Counsel

23.1 Consent of KPMG LLP, filed herewith.

24. Power of Attorney

24.1 Power of Attorney for Directors' and Officers' Signatures on SEC Form 10-K, filed herewith.

31. Certifications

31.1 Certification of Chief Executive Officer of the Company pursuant to Securities and Exchange Act Rule 13d-14(a)/15(d-14(a), as adopted pursuant to Section 302 and 404 of the Sarbanes-Oxley Act of 2002, filed herewith.

31.2 Certification of Chief Financial Officer of the Company pursuant to Securities and Exchange Act Rule 13d-14(a)/15(d-14(a), as adopted pursuant to Section 302 and 404 of the Sarbanes-Oxley Act of 2002, filed herewith.

32. Section 1350 Certifications

32.1 Certification of Chief Executive Officer and Chief Financial Officer of the Company pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, file herewith.

* Management contracts or compensatory plans required to be filed as exhibits pursuant to Item 14 (c) of this report.