GSE SYSTEMS INC Form S-3/A August 18, 2009

As filed with the Securities and Exchange Commission on August 18, 2009

Registration No. 333 161121

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

# Amendment No. 1

to

# Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

# GSE SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware

52-1868008 (I.R.S. Employer Identification Number)

(State or other jurisdiction of incorporation or organization)

1332 Londontown Boulevard, Suite 200 Sykesville, MD 21784 (410) 970-7800

(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Lawrence Gordon, Esq. Vice President and General Counsel GSE Systems, Inc. 1332 Londontown Boulevard, Suite 200 Sykesville, MD 21784 Tel: (410) 970-7800 Fax: (410) 970-7997

(Name, address, including zip code, and telephone number, including area code of agent for service)

With copies to:

Michael D. Schwamm, Esq. Duane Morris LLP 1540 Broadway New York, NY 10036-4086 Tel: (212) 692-1054 Fax: (212) 692-1020

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

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If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall be effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

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 o

Accelerated filer x Non-accelerated filer oSmaller reporting(Do not check if a smallercompany oreporting company)

### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered(1)	Amount to be Registered(1)	Proposed Maximum Offering Price Per Unit(2)	Proposed Maximum Aggregate Offering Price(1)(2)	Regis	nount of tration Fee (3) (4)
Preferred stock, par value \$0.01 per share					
Common stock, par value \$0.01 per share					
Warrants					
Total			\$ 25,000,000	\$	1,395.00

- (1) There are being registered pursuant to this registration statement such indeterminate number of shares of common stock and preferred stock and such indeterminate amount of warrants as may be offered from time to time pursuant to the prospectus contained in the registration statement with an aggregate initial offering price not to exceed \$25,000,000. The securities registered hereunder may be sold by the issuer separately or together with other securities registered hereunder. There are also being registered hereunder an indeterminate amount or number of shares of the securities as may be issuable upon conversion or exchange of preferred stock or warrants or pursuant to antidilution provisions thereof. Separate consideration may or may not be received for securities that are issuable upon conversion of, or in exchange for, or upon exercise of, convertible or exchangeable securities.
- (2) Pursuant to Rule 457(o) and Form S-3 General Instruction II.D., which permit the registration fee to be calculated on the basis of the maximum offering price of all securities listed, the table does not specify information as to the amount of any particular security to be registered.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933.
- (4) Previously paid.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to Completion, dated August 18, 2009

PROSPECTUS

### GSE SYSTEMS, INC.

### \$25,000,000 Preferred Stock Common Stock Warrants

We may offer from time to time to sell common stock, preferred stock or warrants pursuant to this prospectus. The securities covered by this prospectus may be offered and sold by us in one or more offerings. The preferred stock and warrants may be convertible into or exercisable or exchangeable for common stock or preferred stock or other of our securities.

Shares of our common stock are traded on the NYSE Amex Stock Exchange under the symbol GVP.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

This prospectus describes some of the general terms that may apply to these securities. The specific terms of any securities to be offered will be described in a supplement to this prospectus.

You should refer to the risk factors that may be included in a prospectus supplement and in our periodic reports and other information we file with the Securities and Exchange Commission and carefully consider that information before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2009.

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The registration statement containing this prospectus including the exhibits to the registration statement, pr	ovides additional

The registration statement containing this prospectus, including the exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement, including the exhibits and the documents incorporated herein by reference, can be read on the SEC website or at the SEC offices mentioned under the heading Where You Can Find More Information.

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### ABOUT THIS PROSPECTUS

We may from time to time sell the securities in one or more offerings. This prospectus provides you with a general description of the securities. Each time we offer the securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also supplement, modify, or supersede other information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the information incorporated by reference as described below under the heading Incorporation by Reference.

You should rely only on the information provided in this prospectus and in any prospectus supplement, including the information incorporated by reference. We have not authorized anyone to provide you with different information. We are not offering the securities in any state where the offer is not permitted. You should not assume that the information in this prospectus, or any supplement to this prospectus, is accurate at any date other than the date indicated on the cover page of these documents.

### ABOUT GSE SYSTEMS

GSE Systems, Inc. (the Company, GSE or GSE Systems or we or us) is incorporated under the laws of the State of Delaware and is a leader in real-time, high fidelity simulation. The Company provides simulation solutions and services to the nuclear and fossil electric utility industry and the chemical and petrochemical industries. In addition, the Company provides plant monitoring and signal analysis monitoring and optimization software primarily to the power industry.

Our executive offices are located at 1332 Londontown Boulevard, Suite 200, Sykesville, MD 21784 and our telephone number at that location is (410) 970-7800.

### WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public from the SEC s website at *www.sec.gov*. You may also read and copy any document we file at the SEC s public reference room in Washington, D.C., located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room. Information about us is also available at our website at *www.gses.com*. However, the information on our website is not part of this prospectus.

### **INCORPORATION BY REFERENCE**

The SEC allows us to incorporate by reference in this prospectus the information in the documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus. Any information that is part of this prospectus or any prospectus supplement that speaks as of a later date than any other information that is part of this prospectus or any prospectus supplement updates or supersedes such other information. We incorporate by reference in this prospectus the documents listed below and any documents or portions thereof that we file with the SEC after the date of the initial registration statement under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 until we sell, or otherwise terminate the offering of, all of the securities that may be offered by this prospectus. We do not, however, incorporate by reference in this prospectus any documents or portions thereof, or any other information, that we furnish or are deemed to furnish, and not file, with the SEC in accordance with the SEC rules.

- Our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, as amended by Amendment No. 1 thereto filed on June 30, 2009;
- Our Quarterly Reports on Form 10-Q for the fiscal quarter ended March 31, 2009 and June 30, 2009;
- Our Current Reports on Form 8-K filed on March 16, 2009, May 11, 2009 and August 10, 2009; and
- The description of our common stock contained in the Registration Statement on Form 8-A filed on July 24, 1995, under Section 12(g) of the Securities Exchange Act of 1934, as amended.

You may obtain, free of charge, a copy of any of these documents (other than exhibits to these documents unless the exhibits specifically are incorporated by reference into these documents or referred to in this prospectus) by writing or calling us at the following address and telephone number:

GSE Systems, Inc. 1332 Londontown Boulevard, Suite 200 Sykesville, MD 21784 Attn: Corporate Secretary Tel: (410) 970-7800

### FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1993 (the Securities Act ) and Section 21E of the Securities Exchange Act of 1934 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 and 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, po predict, expect, should, will and similar expressions, or the negative of these terms or other comparable terminology, have been used to identify these forward-looking statements. These forward-looking statements may also use different phrases. These statements regarding our expectations reflect our current beliefs and are based on information currently available to us. Accordingly, these statements by their nature are subject to risks and uncertainties, including those listed under 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. Discussions containing these forward-looking statements may be found, among other places, in Business and Management s Discussion and Analysis of Financial Condition and Results of Operations incorporated by reference from our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q subsequent to the filing of our most recent annual report on Form 10-K with the SEC, as well as any amendments thereto reflected in subsequent filings with the SEC. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. Except as otherwise required by federal securities law, we are not obligated to update or revise these forward-looking statements to reflect new events or circumstances. We caution you that a variety of factors, including but not limited to the factors described under the heading 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 patents 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, annual reports on Form 10-K and current reports on Form 8-K filed with the SEC.

### **RISK FACTORS**

An investment in our securities involves a high degree of risk. Before making an investment decision, you should carefully read and consider the risk factors incorporated by reference in this prospectus, as well as those contained in the applicable prospectus supplement, as the same may be updated from time to time by our future filings with the SEC under the Securities Exchange Act of 1934. You should also refer to other information contained in or incorporated by reference in this prospectus and any applicable prospectus supplement, including our financial statements and the related notes incorporated by reference herein. Additional risks and uncertainties not presently known to us at this time or that we currently deem immaterial may also materially and adversely affect our business and operations.

### DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 30,000,000 shares of common stock, par value \$0.01 per share, and 2,000,000 shares of preferred stock, par value \$0.01 per share.

#### **Common Stock**

Subject to the restrictions described below, the holders of our common stock are entitled to receive dividends from funds legally available when, as and if declared by our board of directors, and are entitled upon our liquidation, dissolution or winding up to receive pro rata our net assets after satisfaction in full of the prior rights of our creditors and holders of any preferred stock.

Except as otherwise provided by law and subject to the voting rights of our preferred stock of any series that may be outstanding from time to time, the holders of common stock are entitled to one vote for each share held on all matters as to which stockholders are entitled to vote. The holders of common stock do not have cumulative voting rights. The holders of common stock do not have any preferential, subscriptive or preemptive rights to subscribe to or purchase any new or additional issue of shares of any class of stock or of securities convertible into our stock or any conversion rights with respect to any of our securities. Our common stock is not subject to redemption. All of our issued and outstanding common stock is fully paid and non-assessable.

### **Preferred Stock**

Our certificate of incorporation authorizes our board of directors to establish one or more series of preferred stock and to determine, with respect to any series of preferred stock, the terms and rights of the series, including the following:

- the designation of the series;
- the rate and time of, and conditions and preferences with respect to, dividends, and whether the dividends will be cumulative;

- the voting rights, if any, of shares of the series;
- the price, timing and conditions regarding the redemption of shares of the series and whether a sinking fund should be established for the series;
- the rights and preferences of shares of the series in the event of voluntary or involuntary dissolution, liquidation or winding up of our affairs; and
- the right, if any, to convert or exchange shares of the series into or for stock or securities of any other series or class.

### We currently do not have any shares of preferred stock issued and outstanding. Purposes and Effects of Certain Provisions of Our Certificate of Incorporation and Bylaws

### General

Our certificate of incorporation and bylaws contain provisions that could make more difficult the acquisition of control of our company by means of a tender offer, open market purchases, a proxy contest or otherwise. A description of these provisions is set forth below.

### **Preferred Stock**

Our certificate of incorporation and bylaws contain certain provisions, some of which are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and the policies formulated by our board of directors, and to discourage certain types of coercive takeover practices. However, these provisions, as well as certain provisions of Delaware law, may deter, hinder or delay a change of control of us. These provisions could discourage attempts to acquire us or remove incumbent management even if some or a majority of our stockholders believe that action is in their best interest.

### Classified Board of Directors; Removal of Directors

Our certificate of incorporation divides our board of directors into three classes of directors, with each class serving staggered, three-year terms. Our certificate of incorporation provides that our directors may be removed from office for cause by a vote of a majority in voting power of the then-outstanding shares of our voting stock entitled to vote in the election of directors, voting together as a single group. The classification of our board of directors means that, unless directors are removed by stockholders, it could require at least two annual meetings of stockholders for a majority of stockholders to make a change of control of the board of directors, because only a portion of the directors will be elected at each meeting. In addition, our bylaws provides that the number of directors cannot be increased by 50% or more in any 12-month period without the approval of at least 66-23% of the directors then in office. A significant effect of these provisions may be to deter hostile takeover attempts, because an acquiror could experience delay in replacing a majority of the directors. A classified board of directors also makes it more difficult for stockholders to effect a change of control of the board of directors, even if such a change of control were to be sought due to dissatisfaction with the performance of our company s directors.

### Limitation of Director Liability

Our certificate of incorporation limits the liability of directors to us and our stockholders to the fullest extent permitted by Delaware law. Specifically, a director will not be personally liable for monetary damages for breach of his or her fiduciary duty as a director, except for liability for:

- any breach of the director s duty of loyalty to us or our stockholders;
- acts or omissions which involve intentional misconduct, fraud or a knowing violation of law;
- violations under Section 174 of the Delaware General Corporation Law, which relates to unlawful distributions to stockholders or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

These provisions in our certificate of incorporation may have the effect of reducing the likelihood of derivative litigation against our directors and officers and may discourage or deter stockholders or management from bringing a lawsuit against our directors or officers for breach of their duty of care, even though such an action, if successful, might otherwise have benefited our company and its stockholders. These provisions do not limit or affect a stockholder s ability to seek and obtain relief under federal securities laws.

### Special Meetings of Stockholders

Our bylaws provide that special meetings of stockholders may be called only by our board of directors or by one or more stockholders holding shares which, in the aggregate, entitle them to cast not less than 25% of the votes at the meeting.

#### **Delaware Takeover Statute.**

We are subject to Section 203 of the DGCL, which, subject to certain exceptions, prohibits a Delaware corporation from engaging in any business combination with any interested stockholder (both as defined below) for a period of three years following the date that such stockholder became an interested stockholder, unless: (i) prior to such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder, (ii) on consummation of the transaction that resulted in the stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding those shares owned (x) by persons who are directors and also officers and (y) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) on or subsequent to such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 % of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 of the DGCL defines generally business combination to include: (i) any merger or consolidation involving the corporation and the interested stockholder; (ii) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder; (iii) subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder; (iv) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or (v) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation. In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

### **Transfer Agent**

The transfer agent for our common stock is Continental Stock Transfer & Trust Company.

### **DESCRIPTION OF WARRANTS**

We may issue warrants for the purchase of preferred stock or common stock, or any combination thereof. We may issue warrants independently or together with any other securities offered by a prospectus supplement. Warrants may be attached to or separate from such securities. Each series of warrants will be issued under a separate warrant agreement we will enter into with a warrant agent specified in the applicable prospectus supplement. The warrant agent will act solely as our agent in connection with the warrants of a particular series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

The applicable prospectus supplement will describe the terms of the warrants in respect of which this prospectus is being delivered, including, to the extent applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, number or principal amount and terms of the preferred stock and/or common stock, purchasable upon exercise of the warrants;

- the designation and terms of the other securities, if any, with which the warrants are issued and the number of warrants issued with each security;
- the date, if any, on and after which the warrants and the related underlying securities will be separately transferable;
- whether the warrants will be issued in registered form or bearer form;
- the price at which each underlying security purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants will commence and the date on which that right will expire;
- the identity of the warrant agent;
- the maximum or minimum number of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- a discussion of any material federal income tax considerations; and
- any other terms of the warrants, including terms, procedures, and limitations relating to the transferability, exchange, and exercise of the warrants.

### **RATIO OF EARNINGS TO FIXED CHARGES**

If we offer preferred stock under this prospectus, then we will, at that time, provide a ratio of combined fixed charges and preference dividends to earnings in the applicable prospectus supplement for such offering.

### **USE OF PROCEEDS**

We intend to use the net proceeds from the sales of the securities as set forth in the applicable prospectus supplement.

### PLAN OF DISTRIBUTION

We may sell the securities described in this prospectus to or through one or more agents, underwriters, dealers, in at the market offerings, within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market or an exchange or otherwise, or directly to purchasers on a continuous or delayed basis or through a combination of these methods.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time, at market prices prevailing at the times of sale, at prices related to such prevailing market prices or at negotiated prices.

Each time that we use this prospectus to sell our securities, we will also provide a prospectus supplement. For each series of securities, the applicable prospectus supplement will set forth the terms of the offering including:

- the public offering price;
- the name or names of any underwriters, dealers or agents;
- the purchase price of the securities;
- the proceeds from the sale of the securities to us;
- any underwriting discounts, agency fees or other compensation payable to underwriters or agents;
- any discounts or concessions allowed or reallowed or repaid to dealers; and
- the securities exchange on which the securities will be listed, if any.

If we use underwriters in the sale of securities, the securities will be acquired by the underwriters for their own account. The underwriters may then resell the securities in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale or thereafter. The securities may be either offered to the public through underwriting syndicates represented by managing underwriters, or directly by underwriters. Unless set forth in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. Unless set forth in the prospectus supplement, the underwriters will be obligated to purchase all the securities offered if they purchase any securities. The public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time.

If we use dealers in the sale of securities, we will sell securities to such dealers as principals. The dealers may then resell the securities to the public at varying prices to be determined by such dealers at the time of resale. We may solicit offers to purchase the securities directly, and we may sell the securities directly to institutional or other investors, who may be deemed underwriters within the meaning of the Securities Act with respect to any resales of those securities. The terms of these sales will be described in the applicable prospectus supplement. If we use agents in the sale of securities, unless otherwise indicated in the prospectus supplement, they will use their reasonable best efforts to solicit purchases for the period of their appointment. Unless otherwise indicated in a prospectus supplement, if we sell directly, no underwriters, dealers or agents would be involved. We will not make an offer of securities in any jurisdiction that does not permit such an offer.

We may grant underwriters who participate in the distribution of securities an option to purchase additional securities to cover overallotments, if any, in connection with the distribution. Any underwriter may engage in overallotment, stabilizing transactions, short covering transactions and penalty bids in accordance with SEC orders, rules and regulations and applicable law. To the extent permitted by applicable law and SEC orders, rules and regulations, an overallotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. To the extent permitted by applicable law and SEC orders, rules and regulations, short covering transactions involve purchases of the common stock in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer is purchased in a covering transaction to cover syndicate short positions in stabilization transactions or otherwise. Those activities may cause the price of the common stock to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters who are qualified market makers on the NYSE Amex Stock Exchange may engage in passive market making transactions in the common stock on the NYSE Amex Stock Exchange in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with the applicable volume and price limitations and must be identified as passive market makers. In general a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker s bid, however, the passive market maker s bid must then be lowered when certain purchase limits are exceeded.

Underwriters, dealers and agents that participate in any distribution of securities may be deemed to be underwriters as defined in the Securities Act. Any discounts, commissions or profit they receive when they resell the securities may be treated as underwriting discounts and commissions under the Securities Act. We will identify in the applicable prospectus supplement any underwriters, dealers and agents and will describe their compensation. Only underwriters named in the prospectus supplement are underwriters of the securities offered in the prospectus supplement. We may have agreements with underwriters, dealers and agents to indemnify them against certain civil liabilities, including certain liabilities under the Securities Act, or to contribute with respect to payments that they may be required to make.

We may authorize underwriters, dealers or agents to solicit offers from certain institutions whereby the institution contractually agrees to purchase the securities from us on a future date at a specific price. This type of contract may be made only with institutions that we specifically approve. Such institutions could include banks, insurance companies, pension funds, investment companies and educational and charitable institutions. The underwriters, dealers or agents will not be responsible for the validity or performance of these contracts.

Each series of securities will be a new issue of securities and will have no established trading market, other than our common stock, which is listed on the American Stock Exchange. Unless otherwise specified in the applicable prospectus supplement, the securities will not be listed on any exchange. It has not presently been established whether the underwriters, if any, of the securities will make a market in the securities. If the underwriters make a market in the securities, such market making may be discontinued at any time without notice. No assurance can be given as to the liquidity of the trading market for the securities.

Agents, dealers and underwriters may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which the agents, dealers or underwriters may be required to make in respect thereof. Agents, dealers or underwriters may be customers of, engage in transactions with, or perform services for us and our subsidiaries in the ordinary course of business.

Pursuant to a requirement of the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be received by any FINRA member or independent broker/dealer may not be greater than 8.0% of the gross proceeds received by us for the sale of any securities being registered pursuant to SEC Rule 415.

### **CERTAIN LEGAL MATTERS**

In connection with particular offerings of the securities in the future, and if stated in the applicable prospectus supplements, the validity of those securities may be passed upon for us by Duane Morris LLP. If securities are distributed in an underwritten offering, certain legal matters will be passed upon for the underwriters by counsel identified in the applicable prospectus supplement.

### EXPERTS

The consolidated financial statements of GSE Systems, Inc. as of December 31, 2008 and 2007, and for each of the years in the three-year period ended December 31, 2008, and management s assessment of the effectiveness of internal control over financial reporting as of December 31, 2008 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2008 financial statements refers to the *adoption of FASB Interpretation No. 48, Accounting for Uncertainty in Income Taxes* An Interpretation of FASB Statement No. 109, on January 1, 2007. The audit report on the effective internal control over financial reporting as of December 31, 2008, expresses an opinion that GSE Systems, Inc. did not maintain effective internal control over financial reporting as of December 31, 2008 because of the effect of a material weakness on the achievement of the objectives of the control criteria and contains an explanatory paragraph to a material weakness related to the accounting for derivative instruments.

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# GSE SYSTEMS, INC.

\$25,000,000 Preferred Stock Common Stock Warrants

PROSPECTUS

\_\_\_, 2009

### PART II

### INFORMATION NOT REQUIRED IN PROSPECTUS

### Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses in connection with the issuance and distribution of the securities registered by this registration statement, other than any underwriting discounts and commissions. All of the expenses will be borne by us.

SEC registration fee	\$ 1,395
Legal fees and expenses	*
Accounting fees and expenses	*
Printing and engraving expenses	*
Miscellaneous expenses	*

Total

\* These fees and expenses will be determined based on the number of issuances and amount and type of securities issued. Accordingly, they cannot be estimated at this time.

### Item 15. Indemnification of Directors and Officers.

Under Section 145 of the General Corporation Law of the State of Delaware (the DGCL), a corporation may indemnify its directors, officers, employees and agents and those who serve, at the corporation s request, in such capacities with another enterprise, against expenses (including attorney s fees), as well as judgments, fines and settlements in no derivative lawsuits, actually and reasonably incurred in connection with the defense of any action, suit or proceeding in which they or any of them were or are made parties or are threatened to be made parties by reason of their serving or having served in such capacity. The DGCL provides, however, that such person must have acted in good faith and in a manner he or she reasonably believed to be in (or not opposed to) the best interests of the corporation and, in the case of a criminal action, such person must have had no reasonable cause to believe his or her conduct was unlawful. In addition, the DGCL does not permit indemnification in an action or suit by or in the right of the corporation, where such person has been adjudged liable to the corporation, unless, and only to the extent that, a court determines that such person fairly and reasonably is entitled to indemnity for costs the court deems proper in light of liability adjudication. Indemnity is mandatory to the extent a claim, issue or matter has been successfully defended.

The Company's Fourth Amended and Restated Certificate of Incorporation (the Restated Certificate) provides that the Company shall indemnify and hold harmless, to the fullest extent permitted by Section 145 of the DGCL, as the same may be amended and supplemented, every person who was or is made a party or is threatened to be made a party or is otherwise involved in any action, suit of proceeding by reason of the fact that such person is or was serving as a director or officer of the Company or, while serving as a director or officer of the Company, is or was serving at the request of the Company as a director, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against all expense, liability and loss reasonably incurred or suffered by such person in connection therewith if such person satisfied the applicable level of care to permit such indemnification under the DGCL. The Restated Certificate provides that, subject to any requirements imposed by law or the Company's Bylaws, the right to indemnification includes the right to be paid expenses incurred in defending any proceeding in advance of its final disposition. The Company's Amended and Restated By-Laws (the By-Laws) provide that, if and to the extent required by the DGCL, such an advance payment will only be made upon delivery to the Company of an undertaking, by or on behalf of the director or officer, to repay all amounts so advanced if it is ultimately determined that such director is not entitled to indemnification.

Section 102(b)(7) of the DGCL permits a corporation to include in its certificate of incorporation a provision eliminating or limiting the personal liability of a director to the corporation or its shareholders for monetary damages for breach of fiduciary duty as a director, provided that such provision shall not eliminate or limit the liability of a director (i) for any breach of the director s duty of loyalty to the corporation or its shareholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL (relating to unlawful payment of dividends and unlawful stock purchase and redemption) or (iv) for any transaction from which the director derived an improper personal benefit.

The Restated Certificate also provides that a director shall, to the maximum extent permitted by Section 102(b)(7) of the DGCL (or any successor provision), have no personal liability to the Company or its shareholders for monetary damages for breach of fiduciary duty as a director.

### Item 16. Exhibits.

The following documents are filed as exhibits to this registration statement, including those exhibits incorporated herein by reference to one of our prior filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, as indicated in parentheses:

### Exhibit No.

### Description

- \*1.1 Form of Underwriting Agreement.
- 4.1 Fourth Amended and Restated Articles of Incorporation of GSE Systems, Inc. (Incorporated by reference to Exhibit B to our Definitive Proxy Statement filed on November 20, 2007.)
- 4.2 Amended and Restated Bylaws of GSE Systems, Inc.. (Incorporated by reference to Exhibit A to our Definitive Proxy Statement filed on November 20, 2007.)
- \* 4.3 Form of certificate of designations for preferred stock.
- \* 4.4 Form of warrant.
- \* 4.5 Form of warrant agreement.
- 5.1 Opinion of Duane Morris LLP.
- \*12.1 Statement regarding computation of ratio of earnings to fixed charges.
- 23.1 Consent of KPMG LLP.
- 23.2 Consent of Duane Morris LLP (included in Exhibit 5.1).
- \*\* Power of Attorney
- 24.1

\*\* Previously filed.

### Item 17. Undertakings.

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

*provided, however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

<sup>\*</sup> To be filed by an amendment or as an exhibit to a document filed under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, or otherwise filed, and incorporated by reference herein.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or date of the first sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant s annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan s annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

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Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted against the registrant by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

### SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the undersigned registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sykesville, State of Maryland, on August 18, 2009.

### GSE SYSTEMS, INC

By: /s/ John V. Moran

Name: John V. Moran Title: Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the dates indicated.

/s/ John V. Moran	Chief Executive Officer and Vice Chairman of the Board (Principal Executive Officer)	August 18, 2009
John V. Moran		
/s/ Jeffery G. Hough	Senior Vice President and Chief Financial Officer(Principal Financial and Accounting Officer)	August 18, 2009
Jeffery G. Hough		
*	Chairman of the Board	August 18, 2009
Jerome I. Feldman		
*	Director	August 18, 2009
Michael D. Feldman		
	Director	August, 2009
Dr. Sheldon L. Glashow		
*	Director	August 18, 2009
Jane Bryant Quinn		
	Director	August 18, 2009
Dr. Roger Hagengruber		
*	Director	August 18, 2009
Joseph W. Lewis		
*	Director	August 18, 2009
George J. Pedersen		
*	Director	August 18, 2009
Orrie. Lee Tawes III		

John V. Moran Attorney-in-fact

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### EXHIBIT INDEX

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