GSE SYSTEMS INC Form S-3 August 06, 2009

As filed with the Securities and Exchange Commission on August 6, 2009

Registration No. 333-

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

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

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification Number)

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

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

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

CALCULATION OF REGISTRATION FEE

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

- There are being registered pursuant to this registration statement such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities 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 debt securities, 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.
- 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) The debt securities may be senior, senior subordinated or subordinated and may be secured or unsecured.
- (4) Calculated pursuant to Rule 457(o) under the Securities Act of 1933.

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 6, 2009

PROSPECTUS

GSE SYSTEMS, INC.

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

We may offer from time to time to sell debt securities, common stock, preferred stock or warrants pursuant to this prospectus. The debt securities may be senior, senior subordinated or subordinated and may be secured or unsecured. The securities covered by this prospectus may be offered and sold by us in one or more offerings. The debt securities, 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, 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."

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 this prospectus 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 Report on Form 10-Q for the fiscal quarter ended March 31, 2009;
 - Our Current Reports on Form 8-K filed on March 16, 2009 and May 11, 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 1933 (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", "potential", "predict", "expect", "should", "will" and similar expressions, or the negative of these terms or other comparable terminology, have been used to identify these forward-looking statements. These forward-looking statements may also use different phrases. These statements regarding our expectations reflect our current beliefs and are based on information currently available to us. Accordingly, these statements by their nature are subject to risks and uncertainties, including those listed under "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 DEBT SECURITIES

General

The debt securities that we may offer by this prospectus consist of notes, debentures, or other evidences of our indebtedness, which we refer to collectively as "debt securities." We will set forth the particular terms of the debt securities we offer in a prospectus supplement. The extent, if any, to which the following general provisions apply to particular debt securities will be described in the applicable prospectus supplement. The following description of general terms relating to the debt securities and the indenture under which the debt securities will be issued are summaries only and therefore are not complete. You should read the indenture and the prospectus supplement regarding any particular issuance of debt securities.

The debt securities will be issued under an indenture between us and a trustee that will be named in the applicable prospectus supplement, and may be supplemented or amended from time to time following its execution. The indenture, and any supplemental indentures thereto, will be subject to, and governed by, the Trust Indenture Act of 1939, as amended.

The applicable prospectus supplement will describe the following terms of any series of debt securities that we may offer (to the extent applicable to the debt securities):

- the title of the debt securities;
- the extent, if any, to which the debt securities are subordinated in right of payment to our other indebtedness;
- any provisions relating to any security provided for the debt securities;
- any limit on the aggregate principal amount of the debt securities;
- any guarantees applicable to the debt securities, and any subordination provisions or other limitations applicable to any such guarantees;

- the persons to whom any interest on the debt securities will be payable, if other than the registered holders thereof on the regular record date therefor;
- the date or dates on which the principal of the debt securities will be payable;
- the rate or rates at which the debt securities will bear interest, if any, and the date or dates from which interest will accrue;
- the dates on which interest will be payable and the regular record dates for interest payment dates;
- the place or places where the principal of and any premium, make-whole amount and interest on the debt securities will be payable;
- the period or periods, if any, within which, and the price or prices at which, the debt securities may be redeemed, in whole or in part, at our option;
- our obligation, if any, to redeem or purchase the debt securities pursuant to sinking fund or similar provisions or at the option of a holder and the terms and conditions of any such redemption or purchase;
- the denominations in which the debt securities will be issuable, if other than denominations of \$1,000 and any integral multiple thereof;
- the currency, currencies or currency units, if other than currency of the United States of America, in which payment of the principal of and any premium, make-whole amount or interest on the debt securities will be payable, and the terms and conditions of any elections that may be made available with respect thereto;
- any index or formula used to determine the amount of payments of principal of and any premium, make-whole amount or interest on the debt securities:
- whether the debt securities are to be issued in whole or in part in the form of one or more global securities and, if so, the identity of the depositary, if any, for the global securities;
- the terms and conditions, if any, pursuant to which the debt securities are convertible into or exchangeable for our common stock or other securities of us or any other person;
- any events of default with respect to the debt securities, in addition to or in lieu of those set forth in the indenture, and the remedies therefor;
- the principal amount (or any portion of the principal amount) of the debt securities which will be payable upon any declaration of acceleration of the maturity of the debt securities pursuant to an event of default; and
- the applicability to the debt securities of the provisions described in "— Defeasance" below.

We may issue debt securities at a discount from their stated principal amount. Federal income tax considerations and other special considerations applicable to any debt security issued with original issue discount (which we refer to as an original issue discount security) may be described in an applicable prospectus supplement.

If the purchase price of any series of the debt securities is payable in a foreign currency or currency unit or if the principal of or any premium or interest on any series of the debt securities is payable in a foreign currency or currency unit, the restrictions, elections, general tax considerations, specific terms, and other information with respect to the debt securities and the applicable foreign currency or currency unit will be set forth in an applicable prospectus

supplement.

Unless otherwise indicated in an applicable prospectus supplement:

- the debt securities will be issued only in fully registered form (without coupons) in denominations of \$1,000 or integral multiples thereof; and
- payment of principal, premium, if any, and interest on the debt securities will be payable, and the exchange, conversion, and transfer of debt securities will be registrable, at our office or agency maintained for those purposes and at any other office or agency maintained for those purposes. No service charge will be made for any registration of transfer or exchange of the debt securities, but we may require payment of a sum sufficient to cover any tax or other governmental charge imposed in connection therewith.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depositary or its nominee identified in an applicable prospectus supplement. Unless and until it is exchanged in whole or in part for debt securities in registered form, a global security may not be registered for transfer or exchange except:

- by the depositary to a nominee of the depositary;
- by a nominee of the depositary to the depositary or another nominee of the depositary;
- by the depositary or any nominee of the depositary to a successor depositary or a nominee of the successor depositary; or
 - in any other circumstances described in an applicable prospectus supplement.

The specific terms of the depositary arrangement with respect to any debt securities to be represented by a global security will be described in an applicable prospectus supplement. We expect that the following provisions will apply to depositary arrangements.

Unless otherwise specified in an applicable prospectus supplement, any global security that represents debt securities will be registered in the name of the depositary or its nominee. Upon the deposit of a global security with or on behalf of the depositary for the global security, the depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of the debt securities represented by the global security to the accounts of institutions that are participants in such system. The accounts to be credited will be designated by the underwriters or agents of the debt securities or by us, if the debt securities are offered and sold directly by us.

Ownership of beneficial interests in debt securities represented by a global security will be limited to participants in the book-entry registration and transfer system of the applicable depositary or persons that may hold interests through those participants. Ownership of those beneficial interests by participants will be shown on, and the transfer of ownership will be effected only through, records maintained by the depositary or its nominee for such global security. Ownership of such beneficial interests by persons that hold through such participants will be shown on, and the transfer of such ownership will be effected only through, records maintained by the participants. The laws of some jurisdictions require that specified purchasers of securities take physical delivery of their securities in definitive form. These laws may impair your ability to transfer beneficial interests in a global security.

So long as the depositary for a global security, or its nominee, is the registered owner of the global security, the depositary or the nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the indenture. Unless otherwise specified in an applicable prospectus supplement, owners of beneficial interests in the global security will not be entitled to have any of the debt securities represented by the global security registered in their names, will not receive or be entitled to receive physical delivery of any such debt securities in certificated form, and will not be considered the owners or holders of the debt securities for any purpose under the indenture. Accordingly, each person owning a beneficial interest in debt securities represented by a global security must rely on the procedures of the applicable depositary and, if the person is not a participant in the book-entry registration and transfer system of the applicable depositary, on the procedures of the participant through which the person owns its interest, to exercise any rights of an owner or holder of debt securities under the indenture.

We understand that, under existing industry practices, if an owner of a beneficial interest in debt securities represented by a global security desires to give any notice or take any action that an owner or holder of debt securities is entitled to

give or take under the indenture:

- the applicable depositary would authorize its participants to give the notice or take the action; and
- the participants would authorize persons owning the beneficial interests through the participants to give the notice or take the action or would otherwise act upon the instructions of the persons owning the beneficial interests.

Principal of and any premium and interest on debt securities represented by a global security will be payable in the manner described in an applicable prospectus supplement. Payment of principal of, and any premium or interest on, debt securities represented by a global security will be made to the applicable depositary or its nominee, as the case may be, as the registered owner or the holder of the global security. None of us, the trustee, any paying agent, or the registrar for debt securities represented by a global security will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in those debt securities or for maintaining, supervising, or reviewing any records relating to those beneficial ownership interests.

Certain Covenants

Maintenance of Office or Agency. We will be required to maintain an office or agency in each place of payment for each series of debt securities for notice and demand purposes and for the purposes of presenting or surrendering debt securities for payment, registration of transfer, or exchange.

Paying Agents, Etc. If we act as our own paying agent with respect to any series of debt securities, on or before each due date of the principal of or interest on any of the debt securities of that series, we will be required to segregate and hold in trust for the benefit of the persons entitled to payment a sum sufficient to pay the amount due and to notify the trustee promptly of our action or failure to act. If we have one or more paying agents for any series of debt securities, prior to each due date of the principal of or interest on any debt securities of that series, we will be required to deposit with a paying agent a sum sufficient to pay the amount due and, unless the paying agent is the trustee, to promptly notify the trustee of our action or failure to act. All moneys paid by us to a paying agent for the payment of principal of or interest on any debt securities that remain unclaimed for two years after the principal or interest has become due and payable may be repaid to us, and thereafter the holder of those debt securities may look only to us for payment thereof.

Existence. We will be required to, and will be required to cause our subsidiaries to, preserve and keep in full force and effect our and their existence, charter rights, statutory rights, and franchises, except to the extent that our board of directors determines that the preservation thereof no longer is desirable in the conduct of our business.

Restrictive Covenants. Any restrictive covenants applicable to any series of debt securities will be described in an applicable prospectus supplement.

Events of Default

Unless otherwise specified in the applicable prospectus supplement, the following will be events of default with respect to debt securities of any series:

- (1) default in the payment of any interest on any debt security of that series when due, which default continues for 30 days;
- (2) default in the payment when due of the principal of or premium or make-whole amount, if any, on any debt security of that series when due;
- (3) default in the deposit of any sinking fund payment when due;
- (4) default in the performance, or breach, of our covenants or agreements in the indenture with respect to the debt securities of such series, subject to any applicable notice and cure provisions; and
- (5) specified events of bankruptcy, insolvency, or reorganization involving us or certain of our subsidiaries.

Additional or different events of default applicable to a series of debt securities may be described in a prospectus supplement. An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

Pursuant to the Trust Indenture Act, the trustee is required, within 90 calendar days after the occurrence of a default in respect of any series of debt securities, to give to the holders of the debt securities of that series notice of all uncured defaults known to it, except that:

- in the case of a default in the performance of any covenant of the character contemplated in clause (4) above, no notice will be given until at least 30 calendar days after the occurrence of the default; and
- other than in the case of a default of the character contemplated in clause (1), (2), or (3) above, the trustee may withhold notice if and so long as it in good faith determines that the withholding of notice is in the interests of the holders of the debt securities of that series.

If an event of default described in clause (5) above occurs, the principal of, premium, if any, and accrued interest on the debt securities of that series will become immediately due and payable without any declaration or other act on the part of the trustee or any holder of the debt securities of that series. If any other Event of Default with respect to debt securities of any series occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the debt securities of that series may declare the principal amount of all debt securities of that series to be due and payable immediately. However, at any time after a declaration of acceleration with respect to debt securities of any series has been made, but before a judgment or decree based on such acceleration has been obtained, the holders of a majority in principal amount of the debt securities of that series may, under specified circumstances, rescind and annul such acceleration. See "— Modification and Waiver" below.

Subject to the duty of the trustee to act with the required standard of care during an event of default, the trustee will have no obligation to exercise any of its rights or powers under the indenture at the request or direction of the holders of debt securities, unless holders of debt securities shall have furnished to the trustee reasonable security or indemnity. Subject to the provisions of the indenture, including those requiring security or indemnification of the trustee, the holders of a majority in principal amount of the debt securities of any series will have the right to direct the time, method, and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series.

No holder of a debt security of any series will have any right to institute any proceeding with respect to the indenture or for any remedy thereunder unless:

- the holder has previously given to the trustee written notice of a continuing event of default;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the same series have requested the trustee to institute a proceeding in respect of the event of default;
 - the holder or holders have furnished reasonable indemnity to the trustee to institute the proceeding as trustee;
- the trustee has not received from the holders of a majority in principal amount of the outstanding debt securities of the same series a direction inconsistent with the request; and
 - the trustee has failed to institute the proceeding within 60 calendar days.

However, the limitations described above do not apply to a suit instituted by a holder of a debt security for enforcement of payment of the principal of and interest on such debt security on or after the applicable due dates for the payment of such principal and interest.

We will furnish to the trustee annually a statement as to our performance of our obligations under the indenture and as to any default in our performance.

Modification and Waiver

In general, unless we otherwise indicate in a prospectus supplement, we and the applicable trustee may make modifications and amendments of the indenture with the consent of the holders of not less than a majority in principal amount of the debt securities of each series affected thereby. However, no modification or amendment of the indenture may, without the consent of the holder of each debt security affected thereby:

• change the stated maturity of, or any installment of principal of, or interest on, any debt security;

•

reduce the principal amount of, the rate of interest on, or the premium, if any, payable upon the redemption of, any debt security;

- reduce the amount of principal of an original issue discount security payable upon acceleration of the maturity thereof;
 - change the place or currency of payment of principal of, or premium, if any, or interest on any debt security;
- impair the right to institute suit for the enforcement of any payment on or with respect to any debt security on or after the stated maturity or prepayment date thereof; or
- reduce the percentage in principal amount of debt securities of any series required for modification or amendment of the indenture or for waiver of compliance with certain provisions of the indenture or for waiver of certain defaults.

We may also make modifications and amendments to the indenture for the benefit of holders without their consent, for certain purposes including, but not limited to:

- providing for our successor to assume the covenants under the indenture;
 - adding covenants or events of default;
 - making certain changes to facilitate the issuance of the securities;
 - securing the securities;
 - providing for a successor trustee or additional trustees;
 - curing any ambiguities or inconsistencies;
 - providing for guaranties of, or additional obligors on, the securities;
- permitting or facilitating the defeasance and discharge of the securities; and
 - other changes specified in the indenture.

The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive our compliance with specified covenants of the indenture. The holders of at least a majority in principal amount of the debt securities of any series may, on behalf of the holders of all debt securities of that series, waive any past default under the indenture with respect to that series, except:

- a default in the payment of the principal of, or premium, if any, or interest on, any debt security of that series; or
- a default of a provision of the indenture that cannot be modified or amended without the consent of the holder of each debt security of that series.

Defeasance

Unless otherwise specified in a prospectus supplement applicable to a particular series of debt securities and except as described below, upon compliance with the applicable requirements described below, we:

- (1) will be deemed to have been discharged from our obligations with respect to the debt securities of that series; or
- (2) will be released from our obligations to comply with certain covenants described in the indenture with respect to the debt securities of that series, and the occurrence of an event described in any of clauses (3), (4) and (5) under "— Events of Default" above will no longer be an event of default with respect to the debt securities of that series except to the limited extent described below.

Following any defeasance described in clause (1) or (2) above, we will continue to have specified obligations under the indenture, including obligations to register the transfer or exchange of debt securities of the applicable series; replace destroyed, stolen, lost, or mutilated debt securities of the applicable series; maintain an office or agency in respect of the debt securities of the applicable series; and hold funds for payment to holders of debt securities of the applicable series in trust. In the case of any defeasance described in clause (2) above, any failure by us to comply with our continuing obligations may constitute an event of default with respect to the debt securities of the applicable series as described in clause (4) under "— Events of Defaults" above.

In order to effect any defeasance described in clause (1) or (2) above, we must irrevocably deposit with the trustee, in trust, money or specified government obligations (or depositary receipts therefor) that through the payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay all of the principal of, premium, if any, and interest on the debt securities of such series on the dates such payments are due in accordance with the terms of such debt securities. In addition:

- no event of default or event which with the giving of notice or lapse of time, or both, would become an event of default under the indenture shall have occurred and be continuing on the date of such deposit;
- in the event of any defeasance described in clause (1) above, we shall have delivered an opinion of counsel, stating that (a) we have received from, or there has been published by, the IRS a ruling or (b) there has been a change in applicable federal law, in either case to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred; and

• in the event of any defeasance described in clause (2) above, we shall have delivered an opinion of counsel to the effect that, among other things, the holders of the debt securities of such series will not recognize gain or loss for United States federal income tax purposes as a result of such deposit or defeasance and will be subject to United States federal income tax in the same manner as if such defeasance had not occurred.

If we fail to comply with our remaining obligations under the indenture with respect to the debt securities of the applicable series following a defeasance described in clause (2) above and the debt securities of that series are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and government obligations on deposit with the trustee may be insufficient to pay amounts due on the debt securities of that series at the time of the acceleration resulting from such event of default. However, we will remain liable in respect of such payments.

Satisfaction and Discharge

We, at our option, may satisfy and discharge the indenture (except for specified obligations of us and the trustee, including, among others, the obligations to apply money held in trust) when:

• either:

- (1) all of our debt securities previously authenticated and delivered under the indenture (subject to specified exceptions relating to debt securities that have otherwise been satisfied or provided for) have been delivered to the trustee for cancellation; or
- (2) all of our debt securities not previously delivered to the trustee for cancellation have become due and payable, will become due and payable at their stated maturity within one year, or are to be called for redemption within one year under arrangements satisfactory to the trustee for the giving of notice of redemption by the trustee, and we have deposited or caused to be deposited with the trustee as trust funds for such purpose an amount sufficient to pay and discharge the entire indebtedness on such debt securities, for principal and any premium and interest to the date of such deposit (in the case of debt securities which have become due and payable) or to the stated maturity or redemption date, as the case may be;
 - we have paid or caused to be paid all other sums payable by us under the indenture; and
- we have delivered to the trustee an officer's certificate and an opinion of counsel, each to the effect that all conditions precedent relating to the satisfaction and discharge of the indenture have been satisfied.

Governing Law

The indenture and the debt securities will be governed by, and construed in accordance with, the laws of the State of New York.

Regarding the Trustee

We will provide the name of the trustee in any prospectus supplement relating to the issuance of debt securities and we will also provide certain other information related to the trustee, including describing any relationship we have with the trustee, in such prospectus supplement. The indenture will contain specified limitations on the right of the trustee, should it become our creditor within three months of, or subsequent to, a default by us to make payment in full of principal of or interest on any series of debt securities issued pursuant to the indenture when and as the same

becomes due and payable, to obtain payment of claims, or to realize for its own account on property received in respect of any such claim as security or otherwise, unless and until such default is cured.

The indenture will not prohibit the trustee from serving as trustee under any other indenture to which we may be a party from time to time or from engaging in other transactions with us. If the trustee acquires any conflicting interest within the meaning of the Trust Indenture Act of 1939 and there is an event of default with respect to any series of debt securities, the trustee must eliminate the conflict or resign.

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 becoming an interested 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 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 debt securities, 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 debt securities, 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 debt securities or preferred stock under this prospectus, then we will, at that time, provide a ratio of earnings to fixed charges and/or ratio of combined fixed charges and preference dividends to earnings, respectively, 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 securities in the open market after the distribution is completed to cover syndicate short positions in stabilization transactions or otherwise. 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 NYSE Amex 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 requirement of the Finaincial Industry Regulatory Authority, or FINRA, the maximum commission or discount to be recieved 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 effectiveness of 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 which describes a material weakness related to the accounting for derivative instruments.

GSE SYSTEMS, INC.
\$25,000,000

Debt Securities Preferred Stock Common Stock Warrants

PROSPECTUS

______, 2009

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

CEC

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	*
Trustee's fees and	
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 its former 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.

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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
4.2	filed on November 20, 2007.) Amended and Restated Bylaws of GSE Systems, Inc (Incorporated by
7.2	reference to Exhibit A to our Definitive Proxy Statement filed on November
	20, 2007.)
*4.3	Form of Indenture between GSE Systems, Inc and the Trustee to be designated
	therein relating to debt securities.
*4.4	Form of certificate of designations for preferred stock.
*4.5	Form of warrant.
*4.6	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).
24.1	Power of Attorney (included on the signature page hereto for GSE Systems,
	Inc.)
*25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as
	amended, of the Trustee under the Indenture.

^{*}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.

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.

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- (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 or made in a document incorporated or deemed incorporated by reference into the 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.

(7) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

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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.

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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 6, 2009.

GSE SYSTEMS, INC

By: /s/ John V. Moran

Name: John V. Moran

Title: Chief Executive Officer

POWER OF ATTORNEY

The undersigned directors and officers of GSE Systems, Inc. hereby constitute and appoint [John V. Moran and Jeffery G. Hough], and each of them, each with full power to act and with full power of substitution and resubstitution, our true and lawful attorneys-in-fact and agents with full power to execute in our name and behalf in the capacities indicated below any and all amendments (including post-effective amendments and amendments thereto) to this registration statement and to file the same, with all exhibits and other documents relating thereto and any registration statement relating to any offering made pursuant to this registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act with the Securities and Exchange Commission and hereby ratify and confirm all that such attorney-in-fact or his or her substitute shall lawfully do or cause to be done by virtue hereof.

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 August 6, 2009

Chairman of the Board (Principal

Executive Officer)
John V. Moran

Senior Vice President and Chief Financial August 6, 2009 Officer

(Principal Financial and Accounting

/s/ Jeffery G. Hough Officer)

Jeffery G. Hough

/s/ Jerome I. Feldman Chairman of the Board August 6, 2009
Jerome I. Feldman

August 6, 2009

/s/ Michael D. Feldman Director August 6, 2009 Michael D. Feldman

Director

Dr. Sheldon L. Glashow

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/s/ Jane Bryant Quinn Jane Bryant Quinn	Director		August 6, 2009
Dr. Roger Hagengruber	Director		August 6, 2009
/s/ Joseph W. Lewis Joseph W. Lewis		Director	August 6, 2009
/s/ George J. Pedersen George J. Pedersen		Director	August 6, 2009
/s/ Orrie Lee Tawes III Orrie Lee Tawes III		Director	August 6, 2009
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EXHIBIT INDEX

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 Indenture between GSE Systems, Inc and the Trustee to be designated
	therein relating to debt securities.
*4.4	Form of certificate of designations for preferred stock.
*4.5	Form of warrant.
*4.6	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).
24.1	Power of Attorney (included on the signature page hereto for GSE Systems,
	Inc.)
*25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as
	amended, of the Trustee under the Indenture.

^{*}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

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