As filed with the Securities and Exchange Commission on October 19, 2015

Registration Statement No.

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

FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

LIGHTBRIDGE CORPORATION
(Exact name of registrant as specified in its charter)

Nevada	**1000**	**91-1975651**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

1600 Tysons Boulevard, Suite 550
McLean, VA 22102
(571) 730-1200
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Seth Grae
President and CEO
Lightbridge Corporation
1600 Tysons Boulevard, Suite 550
McLean, Virginia 22102
(571) 730-1200
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:
David R. Crandall
Hogan Lovells US LLP
1200 Seventeenth Street, Suite 1500
Denver, Colorado 80202
(303) 899-7300

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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 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.[ ]

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.[ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) 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.[ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Unit(2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, $0.001 par value	5,730,200	$0.97	$5,558,294	$560

(1) Pursuant to Rule 416, under the Securities Act of 1933, as amended, this registration statement also covers such indeterminate number of additional shares of common stock that become issuable by reason of any stock dividend, stock split or other similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended, based upon the average of the high and low prices of the common stock on the NASDAQ Capital Market on October 13, 2015.

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 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. The selling shareholder 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 the selling shareholder is not soliciting offers to buy these securities in any state where the offer or sale of these securities is not permitted.

Subject to Completion, Dated October 19, 2015

PROSPECTUS

LIGHTBRIDGE CORPORATION

5,730,200 Shares
Common Stock

This prospectus relates to the sale of up to 5,730,200 shares of our common stock by Aspire Capital Fund, LLC. Aspire Capital is also referred to in this prospectus as the selling shareholder. The prices at which the selling shareholder may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of the shares by the selling shareholder. However, we may receive proceeds of up to $10.0 million from the sale of our common stock to the selling shareholder, pursuant to a common stock purchase agreement entered into with the selling shareholder on September 4, 2015, once the registration statement, of which this prospectus is a part, is declared effective.

The selling shareholder is an "underwriter" within the meaning of the Securities Act of 1933, as amended. We will pay the expenses of registering these shares, but all selling and other expenses incurred by the selling shareholder will be paid by the selling shareholder.

Our common stock is listed on the NASDAQ Capital Market under the symbol "LTBR". On October 15, 2015, the last reported sale price of our common stock on the NASDAQ Capital Market was $1.03 per share.

You should read this prospectus and any prospectus supplement, together with additional information described under the heading "Where You Can Find More Information," carefully before you invest in any of our securities.

Investing in our securities involves risks. See "Risk Factors" beginning on page 6 of this prospectus and the risks and uncertainties described in the documents we file with the Securities and Exchange Commission that are incorporated in this prospectus by reference for certain risks and uncertainties relating to an investment 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.

This prospectus is dated 2015.

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We have not, and the selling shareholder has not, authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus or in any supplement to this prospectus or free writing prospectus, and neither we nor the selling shareholder takes any responsibility for any other information that others may give you. This prospectus is not an offer to sell, nor is it a solicitation of an offer to buy, the securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus or any prospectus supplement or free writing prospectus is accurate as of any date other than the date on the front cover of those documents, or that the information contained in any document incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus relates to the offering of our common stock. Before buying any of our common stock, you should carefully read this prospectus, any supplement to this prospectus, the information and documents incorporated herein by reference and the additional information under the heading "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference." These documents contain important information that you should consider when making your investment decision.

References in this prospectus to "Lightbridge," "we," "us," "our," "our Company," or "the Company" mean Lightbridge Corporation, a Nevada corporation, and its consolidated subsidiaries, unless we state otherwise or the context indicates otherwise.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains or incorporates forward-looking statements within the meaning of section 27A of the Securities Act of 1933, as amended, or the Securities Act, and section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements are management's beliefs and assumptions. In addition, other written or oral statements that constitute forward-looking statements are based on current expectations, estimates and projections about the industry and markets in which we operate and statements may be made by or on our behalf. Words such as "should," "could," "may," "will," "expect," "anticipate," "intend," "target," "plan," "believe," "seek," "estimate," variations of such words and similar expressions are intended to identify such forward-looking statements. Such statements include, among others, (i) those concerning market and business segment growth, demand and acceptance of our nuclear energy consulting services and nuclear fuel technology business, (ii) any projections of sales, earnings, revenue, margins or other financial items, (iii) any statements of the plans, strategies and objectives of management for future operations, (iv) any statements regarding future economic conditions or performance, (v) uncertainties related to conducting business in foreign countries, as well as (vi) all assumptions, expectations, predictions, intentions or beliefs about future events. These statements are not guarantees of future performance and involve substantial risks, uncertainties and assumptions that are difficult to predict. Important factors that could cause actual results to differ materially from those in such forward-looking statements are set forth in Item 1A "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2014, our other filings with the Securities and Exchange Commission, or SEC, and any supplement to this prospectus and include but are not limited to:

- our ability to commercialize our nuclear fuel technology;
- our ability to attract new customers;
- our ability to employ and retain qualified employees and consultants that have experience in the nuclear industry;
- competition and competitive factors in the markets in which we compete;
- public perception of nuclear energy generally;
- general economic and business conditions in the local economies in which we regularly conduct business, which can affect demand for our services;
- changes in laws, rules and regulations governing our business;
- development and utilization of our intellectual property; and
- potential and contingent liabilities.

The foregoing list of important factors is not intended to be and is not exhaustive. We base our forward-looking statements on our management's beliefs and assumptions based on information available to our management at the time the statements are made. Actual outcomes and results may differ materially from those expressed, implied or projected in such forward-looking statements and therefore you should not place undue reliance on them. Except as required under the federal securities laws and the rules and regulations of the SEC, we do not have any intention or obligation to update publicly any forward-looking statements after the distribution of this prospectus, whether as a result of new information, future events, changes in assumptions or otherwise.

SUMMARY

This summary highlights selected information about us, this offering and selected information appearing elsewhere in this prospectus and in the documents we incorporate by reference herein. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. You should read this entire prospectus carefully, including the "Risk Factors" section beginning on page 6 of this prospectus and the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2014 and our Quarterly Reports on Form 10-Q, our financial statements and the related notes and the other documents incorporated by reference in this prospectus.

About Lightbridge Corporation

Lightbridge is a leading nuclear fuel technology company and we participate in the nuclear power industry in the United States and internationally. Our mission is to be a world leader in the design and licensing of our patented nuclear fuels that are economically attractive, enhance reactor safety, are proliferation resistant, and produce less waste than current generation nuclear fuels, and to provide world-class strategic advisory services to governments and utilities seeking to develop or expand civil nuclear power programs.

Our business operations can be categorized in two segments:

- *Nuclear Fuel Technology Business*. We develop next generation nuclear fuel technology that has the potential to significantly increase the power output of commercial reactors, reducing the cost of generating nuclear energy and the amount of nuclear waste on a per-megawatt-hour basis and enhancing reactor safety and the proliferation resistance of spent fuel. Our main focus is on our nuclear fuel technology business segment.

- *Nuclear Energy Consulting Business*. We provide nuclear power consulting and strategic advisory services to commercial and governmental entities worldwide.

We were incorporated under the laws of the State of Nevada on February 2, 1999 and engaged in businesses other than our current business until October 6, 2006, when we acquired our wholly-owned subsidiary Thorium Power, Inc.

The address of our principal executive office is 1600 Tysons Boulevard, Suite 550, McLean, Virginia, 22102, and our telephone number is (571) 730-1200. We maintain a website at *www.ltbridge.com* that contains information about our Company, though no information contained on our website is part of this prospectus.

The Offering

Common stock offered by the selling shareholder	Up to 5,730,200 shares, including 300,000 shares previously issued to Aspire Capital as a commitment fee
Common stock outstanding	18,523,423 shares (as of October 5, 2015)(1)
Use of proceeds	The selling shareholder will receive all of the proceeds from the sale of the shares offered for sale by it under this prospectus. We will not receive proceeds from the sale of the shares by the selling shareholder. However, we may receive up to $10.0 million in proceeds from the sale of our common stock to the selling shareholder under the common stock purchase agreement described below. Any proceeds from the selling shareholder that we receive under the purchase agreement are expected to be used for working capital and general corporate purposes.
NASDAQ Capital Market symbol	"LTBR"
Risk factors	See "Risk Factors" beginning on page 6 of this prospectus and the other information included in, or incorporated by reference into, this prospectus for a discussion of certain factors you should carefully consider before deciding to invest in shares of our common stock.

(1) The number of shares of our common stock outstanding excludes 3,518,492 shares of our common stock issuable upon the exercise of stock options outstanding as of October 5, 2015 at a weighted- average exercise price of $5.655 per share and 4,886,764 shares of our common stock issuable upon the exercise of outstanding warrants with an exercise price of $3.79 per share. Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options or warrants described above.

Purchase Agreement with Aspire Capital

On September 4, 2015, we entered into a common stock purchase agreement (referred to in this prospectus as the Purchase Agreement), with Aspire Capital Fund, LLC, an Illinois limited liability company (referred to in this prospectus as Aspire Capital or the selling shareholder), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $10.0 million of our shares of common stock over the approximately 24-month term of the Purchase Agreement. In consideration for entering into the Purchase Agreement, concurrently with the execution of the Purchase Agreement, we issued to Aspire Capital 300,000 shares of our common stock as a commitment fee (referred to in this prospectus as the Commitment Shares). Concurrently with entering into the Purchase Agreement, we also entered into a registration rights agreement with Aspire Capital (referred to in this prospectus as the Registration Rights Agreement), in which we agreed to file one or more registration statements, including the registration statement of which this prospectus is a part, as permissible and necessary to register under the Securities Act the sale of the shares of our common stock that have been and may be issued to Aspire Capital under the Purchase Agreement.

As of October 5, 2015, there were 18,523,423 shares of our common stock outstanding (17,626,275 shares held by non-affiliates), including the 300,000 Commitment Shares, but excluding the 5,430,200 shares offered that have not been issued but may become issuable to Aspire Capital pursuant to the Purchase Agreement. If all of the 5,730,200 shares of our common stock offered hereby were issued and outstanding as of the date hereof, such shares would represent approximately 23.9% of the total common stock outstanding or approximately 24.9% of the non-affiliate shares of common stock outstanding as of the date hereof. The aggregate number of shares that we can issue to Aspire Capital under the Purchase Agreement may in no case exceed 3,614,766 shares of our common stock (which is equal to approximately 19.99% of the common stock outstanding on the date of the Purchase Agreement), unless (i) stockholder approval is obtained to issue more, in which case this 3,614,766 share limitation will not apply, or (ii) stockholder approval has not been obtained and at any time the 3,614,766 share limitation is reached and at all times thereafter the average price paid for all shares issued under the Purchase Agreement (including the 300,000 Commitment Shares) is equal to or greater than $0.95 (the "Minimum Price"), a price equal to the closing sale price of our common stock on the business day before the execution of the Purchase Agreement; provided that at no point in time shall Aspire Capital (together with its affiliates) beneficially own more than 19.99% of our common stock.

Pursuant to the Purchase Agreement and the Registration Rights Agreement, we are registering 5,730,200 shares of our common stock under the Securities Act, which includes the 300,000 Commitment Shares that have already been issued to Aspire Capital and 5,430,200 shares of common stock which we may issue to Aspire Capital after this registration statement is declared effective under the Securities Act. All 5,730,200 shares of common stock are being offered pursuant to this prospectus. Under the Purchase Agreement, we have the right but not the obligation to issue more than the 5,730,200 shares of common stock included in this prospectus to Aspire Capital. As of the date hereof, we do not have any plans or intent to issue to Aspire Capital any shares of common stock in addition to the 5,730,200 shares of common stock offered hereby.

After the Securities and Exchange Commission, or the SEC, has declared effective the registration statement of which this prospectus is a part, on any trading day on which the closing sale price of our common stock equals or exceeds $0.10, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice (each a "Purchase Notice") directing Aspire Capital (as principal) to purchase up to 100,000 shares of our common stock per trading day, provided that the aggregate price of such purchase shall not exceed $250,000 per trading day, up to $10.0 million of our common stock in the aggregate at a per share price (the "Purchase Price") calculated by reference to the prevailing market price of our common stock (as more specifically described below).

In addition, on any date on which we submit a Purchase Notice for 100,000 shares to Aspire Capital and the closing sale price of our stock equals or exceeds $0.10 per share of common stock, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice (each a "VWAP Purchase Notice") directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on the NASDAQ Capital Market on the next trading day (the "VWAP Purchase Date"), subject to a maximum number of shares we may determine (the "VWAP Purchase Share Volume Maximum") and a minimum trading price (the "VWAP Minimum Price Threshold"), as more specifically described below. The purchase price per Purchase Share pursuant to such VWAP Purchase Notice (the "VWAP Purchase Price") is calculated by reference to the prevailing market price of our common stock (as more specifically described below).

The Purchase Agreement provides that the Company and Aspire Capital shall not effect any sales under the Purchase Agreement on any purchase date where the closing sale price of our common stock is less than $0.10 per share (the "Floor Price"). The Floor Price and the respective prices and share numbers in the preceding paragraphs shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction. There are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

RISK FACTORS

An investment in our common involves a high degree of risk. Prior to making a decision about investing in our common stock, you should carefully consider the risk factors described below and the risk factors discussed in the sections entitled "Risk Factors" contained in our Annual Report on Form 10-K for the year ended December 31, 2014, our Quarterly Reports on Form 10-Q and in any applicable prospectus supplement and our other filings with the SEC and incorporated by reference in this prospectus, together with all of the other information contained in this prospectus, or any applicable prospectus supplement. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline and you might lose all or part of your investment.

Risks Related to the Company

We will need to raise significant additional capital in the future to expand our operations and continue our research and development and we may be unable to raise such funds when needed and on acceptable terms.

We will need to raise significant additional capital in order to continue our research and development activities and fund our operations. Our current plan is to seek external funding from third party sources to support a large portion of the remaining development, testing and demonstration activities relating to our metallic nuclear fuel technology. The extent to which we utilize the Purchase Agreement with Aspire Capital as a source of funding will depend on a number of factors, including the prevailing market price of our common stock, the volume of trading in our common stock and the extent to which we are able to secure funds from other sources. The number of shares that we may sell to Aspire Capital under the Purchase Agreement on any given day and during the term of the Purchase Agreement is limited. See "The Aspire Capital Transaction" for additional information. Additionally, we and Aspire Capital may not effect any sales of shares of our common stock under the Purchase Agreement during the continuance of an event of default or on any trading day that the closing sale price of our common stock is less than $0.10 per share. Even if we are able to access the full $10.0 million under the Purchase Agreement, we will still need additional capital to fully implement our business, operating and development plans.

When we elect to raise additional funds or additional funds are required, we may raise such funds from time to time through public or private equity offerings, debt financings or other financing alternatives, as well as through sales of common stock to Aspire Capital under the Purchase Agreement. Additional equity or debt financing or other alternative sources of capital may not be available to us on acceptable terms, if at all.

If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, would result in substantial fixed payment obligations and may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Any debt financing or additional equity that we raise may contain terms, such as liquidation and other preferences, which are not favorable to us or our stockholders. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may not be able to fully develop our nuclear fuel designs, our future operations will be limited, and our ability to generate revenues and achieve or sustain future profitability will be substantially harmed.

If we are unable to enter into one or more commercial agreements with nuclear fuel fabricators and/or fuel development partners, we may not be able to raise money on terms acceptable to us or at all.

We are currently in discussions with potential development partners regarding entry into agreements to support our research and development activities and further enhance the development of our fuel products. We are unable to provide a reliable estimate as to the likelihood or timing of any such agreements at this time. If we are unable to demonstrate meaningful progress towards entry into these agreements or other strategic arrangements to further the development of our fuel products, it may be difficult for us to raise additional capital on terms acceptable to us or at all. If we are unable to raise additional capital, it is unlikely that we may be able to execute our current business plan.

If the price of non-nuclear energy sources falls, there could be an adverse impact on new build nuclear reactor activities in certain markets, which would have a material adverse effect on our operations.

In certain markets with a diversified energy base, decisions on new build power plants are largely affected by the economics of various energy sources. If prices of non-nuclear energy sources fall, it could limit the deployment of new build nuclear power plants in such markets. This could reduce the size of the potential markets for both our fuel technology and our consulting services.

We may be adversely affected by uncertainty in the global financial markets and worldwide economic downturn.

Our future results may be adversely affected by the worldwide economic downturn, continued volatility or further deterioration in the debt and equity capital markets, inflation, deflation, or other adverse economic conditions that may negatively affect us. At present, it is likely that we will require additional capital in the near future in order to fund our operations. Due to the above listed factors, we cannot be certain that additional funding will be available on terms that are acceptable to us, or at all.

We may be adversely affected by public opposition to nuclear energy as a result of the major nuclear accident at Fukushima, Japan.

The major nuclear accident at the Fukushima nuclear power plant in Japan following the strong earthquake and massive tsunami that occurred on March 11, 2011, increased public opposition to nuclear power in some countries, resulting in a slowdown in, or, in some cases, a complete halt to, new construction of nuclear power plants and an early shut down of existing power plants in certain countries. As a result, some countries that were considering launching new domestic nuclear power programs before the Fukushima accident have delayed or cancelled preparatory activities they were planning to undertake as part of such programs. This has diminished the number of consulting opportunities that we could compete on globally, at least in the near-term. In addition, the Fukushima accident appears to have shrunk the projected size of the global nuclear power market in 2025-2030 as reflected in the most recent reference case projections published by the World Nuclear Association.

Our limited operating history makes it difficult to judge our prospects.

Prior to 2008, we were a development stage company. We have commenced the provision of nuclear consulting services and currently have only a limited number of clients in this area of our business. Similarly, our fuel design patents and technology have not been commercially used and we have not received any royalty or sales revenue from this area of our business. We are subject to the risks, expenses and problems frequently encountered by companies in the early stages of development.

The accounting treatment for our outstanding warrants is highly complex, and we may be required to restate our historical financial statements to account for our warrants as a derivative liability under GAAP.

The accounting treatment for warrants is highly complex and subject to judgments concerning the appropriate categorization under generally accepted accounting principles (GAAP). We have historically accounted for our outstanding warrants as a component of stockholders' equity, based on the terms of the warrants and the application of FASB Accounting Standards Codification Topic 815-40, *Derivatives and Hedging — Contracts in Entity's Own Equity*. Management has determined to seek guidance from the Office of the Chief Accountant of the SEC concerning the appropriate accounting treatment for our outstanding warrants. On September 4, 2015, management sent a letter to the SEC requesting confirmation that the SEC staff does not object to the Company's presentation of its outstanding warrants as a component of stockholders' equity. While management, our independent outside auditors and the Company's Audit Committee all agree with the classification of the outstanding warrants as a component of stockholders' equity, there can be no guarantee that the SEC staff will agree, and we could be required to restate our historical financial statements to reclassify the warrants as a derivative liability instead of as a component of stockholders' equity. The need to restate our financial results could, among other potential adverse effects, result in us incurring additional costs, affect our ability to timely file our periodic reports until such restatement is completed, result in material changes to our historical and future financial results, result in investors losing confidence in our operating results, and cause our stock price to decline.

If we were to reclassify the warrants as a derivative liability, we would be required to "mark to market" the derivative liability each reporting period under applicable accounting rules and record changes in the fair value associated with the derivative liability in our consolidated statement of operations. As such, when the trading price for our common stock increases, the fair value of the derivative liability would generally increase and we would recognize an expense associated with this change in fair value. Similarly, when our trading price decreases, the fair value of the derivative liability would generally decrease and we would recognize a gain associated with this change in fair value. As such, though there would be no cash flow impact to us caused by the volatility of our trading price, applicable accounting rules will directly impact our reported profit or loss pursuant to GAAP.

In addition, the continued listing standards of the NASDAQ Capital Market, on which our common stock is listed, require, among other things, that we maintain at least $2.5 million in stockholders' equity until either the market value of our listed securities is at least $35.0 million or we have net income from continuing operations of at least $500,000 in the most recently completed fiscal year or in two of the three most recently completed fiscal years. A reclassification of the warrants to a derivative liability could reduce our stockholders' equity for purposes of this continued NASDAQ listing requirement and financial reporting purposes. In particular, an increasing warrant liability that would result from a continual increase in the trading price of our common stock at the end of each financial reporting period may make it more difficult for us to maintain the minimum stockholders' equity required for the NASDAQ Capital Market. Failure to remain listed on the NASDAQ Capital Market could have a material adverse effect on the value and liquidity of our securities.

We rely upon certain members of our senior management, including Seth Grae, and the loss of Mr. Grae or any of our senior management would have an adverse effect on the Company.

Our success depends upon certain members of our senior management, including Seth Grae, our Chief Executive Officer. Mr. Grae's knowledge of the nuclear power industry, his network of key contacts within that industry and in governments and, in particular, his expertise in the potential markets for our technologies, is critical to the implementation of our business model. Mr. Grae is likely to be a significant factor in our future growth and success. The loss of services by Mr. Grae would likely have a material adverse effect on us.

Competition for highly skilled professionals could have a material adverse effect on our success.

We rely heavily on our contractor staff and management team. Our success depends, in large part, on our ability to hire, retain, develop, and motivate highly skilled professionals. Competition for these skilled professionals is intense and our inability to hire, retain and motivate adequate numbers of consultants and managers could adversely affect our ability to meet client needs and to continue the development of our fuel designs. A loss of a significant number of our employees could have a significant negative effect on us. Any significant volatility or sustained decline in the market price of our common stock could impair our ability to use equity-based compensation to attract, retain, and motivate key employees and consultants.

Successful execution of our business model is dependent upon public support for nuclear power and overcoming public opposition to nuclear energy as a result of the major nuclear accident at Fukushima.

Successful execution of our business model is dependent upon public support for nuclear power in the United States and other countries. Nuclear power faces strong opposition from certain competitive energy sources, individuals, and organizations. The major nuclear accident that occurred at the Fukushima nuclear power plant in Japan beginning on March 11, 2011, has had an adverse effect on public opinion about nuclear power in some countries and the favorable regulatory climate needed to introduce new nuclear technologies. Strong public opposition has hindered the construction of new nuclear power plants and led to early shut-down of the existing nuclear power plants. Furthermore, nuclear fuel fabrication and the use of new nuclear fuels in reactors must be licensed by the US Nuclear Regulatory Commission and equivalent governmental authorities around the world. In many countries, the licensing process includes public hearings in which opponents of the use of nuclear power might be able to cause the issuance of required licenses to be delayed or denied. Following the Fukushima nuclear accident, some countries have announced their plans to delay, scale down, or cancel deployment of new nuclear power plants while others, such as Germany, have decided to completely phase out nuclear power over the coming years.

We may not be able to receive or retain authorizations that may be required for us to sell our services, or license our technology internationally.

The sales and marketing of our services and technology internationally may be subject to US export control regulations and the export control laws of other countries. Governmental authorizations may be required before we can export our services or technology. If authorizations are required and not granted, our international business plans could be materially affected. The export authorization process is often time consuming. Violation of export control regulations could subject us to fines and other penalties, such as losing the ability to export for a period of years, which would limit our revenue growth opportunities and significantly hinder our attempts to expand our business internationally.

Risks Relating to Our Securities

The sale of our common stock to Aspire Capital may cause substantial dilution to our existing shareholders and the sale of the shares of common stock acquired by Aspire Capital could cause the price of our common stock to decline.

We are registering for sale the 300,000 Commitment Shares that we have issued and 5,430,200 shares that we may sell to Aspire Capital under the Purchase Agreement. It is anticipated that shares registered in this offering will be sold over a period of up to approximately 24 months from the date of this prospectus. The number of shares ultimately offered for sale by Aspire Capital under this prospectus is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. Depending upon market liquidity at the time, sales of shares of our common stock under the Purchase Agreement may cause the trading price of our common stock to decline.

Aspire Capital may ultimately purchase all, some or none of the $10.0 million of common stock that, together with the 300,000 Commitment Shares, is the subject of this prospectus. Aspire Capital may sell all, some or none of our shares that it holds or comes to hold under the Purchase Agreement. Sales by Aspire Capital of shares acquired pursuant to the Purchase Agreement under the registration statement, of which this prospectus is a part, may result in dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock by Aspire Capital in this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales. However, we have the right to control the timing and amount of sales of our shares to Aspire Capital, and the Purchase Agreement may be terminated by us at any time at our discretion without any penalty or cost to us.

There may be volatility in our stock price, which could negatively affect investments, and stockholders may not be able to resell their shares at or above the value they originally purchased such shares.

The market price of our common stock may fluctuate significantly in response to a number of factors, some of which are beyond our control, including:

- quarterly variations in operating results;
- changes in financial estimates by securities analysts;
- changes in market valuations of other similar companies;
- limited liquidity in our common stock;
- announcements by us or our competitors of new products or of significant technical innovations, contracts, receipt of (or failure to obtain) government funding or support, acquisitions, strategic partnerships or joint ventures;
- additions or departures of key personnel;
- any deviations in net sales or in losses from levels expected by securities analysts, or any reduction in political support from levels expected by securities analysts;
- future sales of common stock; and
- nuclear accidents or other adverse nuclear industry events.

The stock market may experience extreme volatility that is often unrelated to the performance of particular companies. These market fluctuations may cause our stock price to fall regardless of its performance.

Risks Related to Our Fuel Technology Business

Our fuel designs have never been tested in an existing commercial reactor and actual fuel performance, as well as the willingness of commercial reactor operators and fuel fabricators to adopt a new design, is uncertain.

Nuclear power research and development entails significant technological risk. New designs must undergo extensive development and testing necessary for regulatory approval. Our fuel designs are still in the research and development stage and while certain testing on our fuel technologies has been completed, further testing and experiments will be required in test facilities. Furthermore, the fuel technology has yet to be demonstrated in operating conditions analogous to those found in an existing commercial reactor. Until we are able to successfully demonstrate operation of our fuel designs in commercial reactor conditions, we will not be certain about the ability of the fuel we design to perform as expected. In addition, there is also a risk that suitable testing facilities may not be available to us on a timely basis or at a reasonable cost, which could cause development program schedule delays.

We will also have to enter into a commercial arrangement with a fuel fabricator to produce fuel using our designs.

If our fuel designs do not perform as anticipated in commercial reactor conditions, we will not realize revenues from licensing or other use of our fuel designs.

Potential competitors could limit opportunities to license our technology.

Part of our strategy is to partner with major fuel fabricators through technology licensing arrangements. However, these fuel fabricators may potentially develop new nuclear fuel designs that can be used in the same types of reactors as those that we target. Existing fuel fabricators also have established commercial connections to nuclear power facilities that we do not have. If these types of companies were to compete with our nuclear fuel design technology, opportunities to license our technology would be limited.

Moreover, many of these fuel fabricators have substantially greater financial, technological, managerial and research and development resources and experience than we do. These larger companies may be better able to handle the corresponding long-term financial requirements.

We serve the nuclear power industry, which is highly regulated. Our fuel designs differ from fuels currently licensed and used by commercial nuclear power plants. The regulatory licensing and approval process for nuclear power plants to use our fuels may be delayed and made more costly, and industry acceptance of our fuels may be hampered.

The nuclear power industry is a highly regulated industry. All entities that operate nuclear facilities and transport nuclear materials are subject to the jurisdiction of the US Nuclear Regulatory Commission, or its counterparts around the world.

Our fuel designs differ significantly in some aspects from the fuel used today by commercial nuclear power plants. These differences will likely result in more prolonged and extensive review by the US Nuclear Regulatory Commission or its counterparts around the world that could cause development program schedule delays. Entities within the nuclear industry may be hesitant to be the first to use our fuel, which has little or no history of successful commercial use. Furthermore, our fuel development timeline relies on the relevant nuclear regulator to accept and approve technical information and documentation about our fuel that is generated during the research and development program. There is a risk that regulators may require additional information regarding the fuel's behavior or performance that necessitates additional, unplanned analytical and/or experimental work which could cause program schedule delays and require more research and development funding.

Existing commercial nuclear infrastructure in many countries is limited to uranium material enrichments up to 5%. Our metallic fuel is enriched to higher levels which would require modifications to existing commercial nuclear infrastructure and could impede commercialization of our technology.

Existing commercial nuclear infrastructure, including conversion facilities, enrichment facilities, fabrication facilities, fuel storage facilities, fuel handling procedures, fuel operation at reactor sites, used fuel storage facilities and shipping containers, were designed and are currently licensed to handle uranium enrichment up to 5%. Our fuel designs are expected to have enrichment levels up to 19.7% and would therefore require certain modifications to existing commercial nuclear infrastructure to enable commercial nuclear facilities to handle our fuels. Those nuclear facilities will need to go through a regulatory licensing process and obtain regulatory approvals to be able to handle uranium with enrichment levels up to 19.7% and operate commercial reactors using our fuel. There is a risk that some relevant entities within the nuclear power industry may be slow in making any required facility infrastructure modifications or obtaining required licenses or approvals to handle our fuel or operate commercial reactors using our fuel. There is also a risk associated with possible negative perception of uranium enrichment greater than 5% that could potentially delay or hinder regulatory approval of our nuclear fuel designs.

Our nuclear fuel designs rely on fabrication technologies that in certain material ways are different from the fabrication techniques presently utilized by existing commercial fuel fabricators. In particular, our metallic fuel rods must be produced using a co-extrusion fabrication process. Presently, most commercial nuclear fuel is produced using a pellet fabrication technology, whereby uranium oxide is packed into small pellets that are stacked and sealed inside metallic tubes. Our co-extrusion fabrication technology involves extrusion of a single-piece solid fuel rod from a metallic matrix containing uranium and zirconium alloy. Fabrication of full-length (approximately 3.5 to 4.5 meters) PWR metallic fuel rods has yet to be demonstrated. There is a risk that the fuel fabrication process utilized to produce one meter long metallic fuel rods may not be adaptable to the fabrication of full-length metallic fuel rods used in commercial reactors.

Our plans to develop our fuel designs depend on our ability to acquire the rights to the designs, data, processes, and methodologies that are used or may be used in our business in the future. If we are unable to obtain such rights on reasonable terms in the future or develop our own know-how necessary for fabrication of our nuclear fuel designs, our ability to exploit our intellectual property may be limited.

We do not currently possess all of the necessary know-how or have licensing or other rights to acquire or utilize certain designs, data, methodologies, or processes required for the fabrication of our fuel assemblies. If we, or a fuel fabricator to which we license our fuel technology, desires to utilize such existing processes or methodologies in the future, a license or other right to use such technologies from other entities that previously developed and own such technologies would be required. Alternatively, we would have to develop our own know-how necessary for fabrication of our metallic fuel rods and fuel assembly components. Nuclear operators typically seek diversity of fuel supply and may be hesitant to use a fuel product that is only available from a single supplier. If we are unable to obtain a license or other right to acquire or utilize certain processes or develop our own know-how required for the fabrication of our metallic fuel rods and fuel assembly components, or there is only a single supplier of our fuel assemblies, then we may not be able to fully exploit our intellectual property and may be hindered in the sale of our fuel products and services.

Some of our nuclear engineering work is performed by individual consultants based in Russia, making it subject to political uncertainties relating to Russia and US.-Russian relations.

Some of our nuclear engineering work is performed by individual consultants based in Russia. Our nuclear engineering operations conducted in Russia are subject to various political risks and uncertainties inherent in the country of Russia. If US-Russia relations deteriorate, the Russian government may decide to scale back or even cease completely its cooperation with the United States on various international projects, including nuclear power technology development programs, or the US government may decide to impose sanctions or other legal restrictions preventing US businesses from doing business in Russia. If this should happen, nuclear engineering activities performed by our Russian consultants could be scaled back or shut down, which could cause development program schedule delays and may require additional funding to hire nuclear engineering consultants with similar skills outside Russia. In October 2014, we signed an Initial Cooperation Agreement with Canadian Nuclear Laboratories (CNL) for fabrication and loop irradiation testing of Lightbridge-designed nuclear fuel samples in Canada, and in September 2015, we signed a Comprehensive Nuclear Services Agreement with CNL providing the framework to proceed with test fuel sample fabrication at CNL's facilities in Chalk River. On November 12, 2014, we received a US export authorization letter from the National Nuclear Security Administration of the US Department of Energy approving our proposed scope of work in Canada. We intend to continue pursuing a strategy of shifting the most critical elements of our R&D activities away from Russia to mitigate Russia political risk.

Our plans to develop our fuel technology depend on the renewal of the 123 Agreement between the United States and Norway. If the 123 Agreement is not renewed, we may suffer program schedule delays, which could have a detrimental impact on our operations.

In October 2014, we announced the signing of an Initial Cooperation Agreement with Canadian Nuclear Laboratories (CNL), formerly known as AECL – Chalk River Laboratories, in Canada to perform fabrication and loop irradiation testing of Lightbridge-designed fuel samples at CNL's existing facilities at Chalk River, ON, Canada. At the time of the announcement of the Initial Cooperation Agreement, our preference was for all of the proposed work to take place at a single location in Chalk River, Ontario, Canada. Subsequently, on February 9, 2015, the Canadian government made an official decision to extend the operating life of the National Research Universal reactor at Chalk River from 2016 through March 31, 2018. This shorter than expected operating life extension would not be able to accommodate all of our anticipated schedule for irradiation testing of our metallic fuel samples. Shipping partially irradiated fuel samples from Canada to another research reactor in a different country would entail significantly higher shipping costs, longer timelines, and more challenging transportation logistics. As a result, our current plan is to work with CNL on fabrication of our fuel samples at their Chalk River facilities, with full irradiation of the fabricated fuel samples to be performed in a pressurized water loop of the Halden research reactor located in Halden, Norway. The operating license of the Halden research reactor has recently been renewed through 2020 which would allow us to maintain our proposed irradiation testing schedule. Our current plan is to have post-irradiation examination of the irradiated fuel samples performed on the same site in Norway or to utilize additional nearby hot cell facilities located in Studsvik, Sweden that are operated by the Swedish company Studsvik AB.

In February 2015, in response to our request for guidance, the National Nuclear Security Administration of the US Department of Energy, or NNSA, confirmed that the proposed activities relating to fabrication, irradiation testing and post-irradiation examination of our fuel samples as outlined in our revised plan are generally authorized. However, the NNSA supplementally stated that a transfer of our fuel samples to Norway would not be possible until the "123 Agreement" between the United States and Norway was renewed. A "123 Agreement" is required under Section 123 of the U.S. Atomic Energy Act for significant transfers of nuclear material, equipment, or components from the United States to another nation. The State Department and Norway are presently negotiating the renewal of the 123 Agreement. However, if the 123 Agreement between the United States and Norway is not renewed by the time our fuel samples are fabricated and ready for shipment (currently expected around the end of 2016), we may risk program schedule delays. Such delays could disrupt our fuel technology development plans, which may have a detrimental impact on the results of our operations.

If the US Department of Energy ("DOE") were to successfully assert that an invention claimed within our 2007 or 2008 Patent Cooperation Treaty, or PCT, patent applications was first conceived or actually reduced to practice under a contract with the DOE, then our intellectual property rights in that invention could become compromised and our business model could become significantly impeded.

Work on finite aspects and/or testing of some subject matter disclosed in our 2007 and 2008 Russian PCT patent applications was done under a government contract with the DOE. If the DOE asserted that an invention claimed in the 2007 and/or 2008 Russian PCT applications was first conceived or actually reduced to practice under such a contract, and a US court agreed, the DOE could gain an ownership interest in such an invention outside of the Russian Federation and our intellectual property rights in that claimed invention could become compromised and our business model may then be significantly impeded.

If we are unable to obtain or maintain intellectual property rights relating to our technology, the commercial value of our technology may be adversely affected, which could in turn adversely affect our business, financial condition and results of operations.

Our success and ability to compete depends in part upon our ability to obtain protection in the United States and other countries for our nuclear fuel designs by establishing and maintaining intellectual property rights relating to or incorporated into our fuel technologies and products. We own a variety of patents and patent applications in the United States, as well as corresponding patents and patent applications in several other jurisdictions. We have not obtained patent protection in each market in which we plan to compete. We do not know how successful we would be should we choose to assert our patents against suspected infringers. Our pending and future patent applications may not issue as patents or, if issued, may not issue in a form that will be advantageous to us. Even if issued, patents may be challenged, narrowed, invalidated, or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection, which could in turn adversely affect our business, financial condition and results of operations.

If we infringe or are alleged to infringe intellectual property rights of third parties, our business, financial condition and results of operations could be adversely affected.

Our nuclear fuel designs may infringe, or be claimed to infringe, patents or patent applications under which we do not hold licenses or other rights. Third parties may own or control these patents and patent applications in the United States and elsewhere. Third parties could bring claims against us that would cause us to incur substantial expenses and, if successfully asserted against us, could cause us to pay substantial damages. If a patent infringement suit were brought against us, we could be forced to stop or delay commercialization of the fuel design or a component thereof that is the subject of the suit. As a result of patent infringement claims, or in order to avoid potential claims, we may choose or be required to seek a license from the third party and be required to pay license fees, royalties, or both. These licenses may not be available on acceptable terms, or at all. Even if we were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we could be forced to cease some aspect of our business operations if, as a result of actual or threatened patent infringement claims, we are unable to enter into licenses on acceptable terms.

This could significantly and adversely affect our business, financial condition, and results of operations. In addition to infringement claims against us, we may become a party to other types of patent litigation and other proceedings, including interference proceedings declared by the United States Patent and Trademark Office regarding intellectual property rights with respect to our nuclear fuel designs. The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

Our nuclear fuel process is dependent on outside suppliers of nuclear and other materials and any difficulty by a fuel fabricator in obtaining these materials could be detrimental to our ability to eventually market our fuel through a fuel fabricator.

Production of fuel assemblies using our nuclear fuel designs is dependent on the ability of fuel fabricators to obtain supplies of nuclear material utilized in our fuel assembly design. Fabricators will also need to obtain metal for components, particularly zirconium or its alloys. These materials are regulated and can be difficult to obtain or may have unfavorable pricing terms. Any difficulties in obtaining these materials by fuel fabricators could have a material adverse effect on their ability to market fuel based on our technology.

Applicable Russian intellectual property law may be inadequate to protect some of our intellectual property, which could have a material adverse effect on our business.

Intellectual property rights are evolving in Russia, and are trending towards international norms, but are by no means fully developed. We have worked closely with employees in Russia and other Russian contractors and entities to develop some of our material intellectual property. Some of our earlier intellectual property rights originate from our patent filings in Russia. Our worldwide rights in some of this intellectual property, therefore, may be affected by Russian intellectual property laws. If the application of Russian laws to some of our intellectual property rights proves inadequate, then we may not be able to fully avail ourselves of all of our intellectual property, and our business model may be impeded.

Risks Associated With Our Consulting Activities.

Our inability to attract business from new clients, maintain current levels of business, or retain our existing clients could have a material adverse effect on us.

We expect that many of our future client engagement agreements will be terminable by our clients with little or no notice and without penalty. Some of our work may involve multiple engagements or stages. In those engagements, there is a risk that a client may choose not to retain us for additional stages of an engagement or that a client will cancel or delay additional planned engagements. In addition, a small number of existing clients account for a majority of our consulting revenues, the loss of any one of which would have a material adverse effect on our results of operations. Some of our existing clients reduced their utilization of our consulting services beginning in 2013. Our current consulting clients are not contractually obligated to purchase a certain level of services from us and may significantly reduce their utilization of our services, resulting in a material reduction in revenue.

Our future profitability will suffer if we are not able to maintain current pricing and utilization rates.

Our revenue, and our profitability, will be largely based on the billing rates charged to clients and the number of hours our professionals work on client engagements, which we define as the "utilization" of our professionals. Accordingly, if we are not able to maintain the pricing for our services or an appropriate utilization rate for our professionals, revenues, project profit margins and our future profitability will suffer.

Bill rates and utilization rates are affected by a number of factors, including:

- our ability to predict future demand for services and maintain the appropriate headcount and minimize the number of underutilized personnel;
- our clients' perceptions of our ability to add value through our services;
- our competitors' pricing for similar services;
- the market demand for our services; and
- our ability to manage significantly larger and more diverse workforces as we increase the number of our professionals and execute our growth strategies.

Unsuccessful future client engagements could result in damage to our professional reputation or legal liability, which could have a material adverse effect on us.

Our professional reputation and that of our personnel is critical to our ability to successfully compete for new client engagements and attract or retain professionals. Any factors that damage our professional reputation could have a material adverse effect on our business.

Any client engagements that we obtain will be subject to the risk of legal liability. Any public assertion or litigation alleging that our services were negligent or that we breached any of our obligations to a client could expose us to significant legal liabilities, could distract our management, and could damage our reputation. We carry professional liability insurance, but our insurance may not cover every type of claim or liability that could potentially arise from our engagements. The limits of our insurance coverage may not be enough to cover a particular claim or a group of claims, and the costs of defense.

Our results of operations could be adversely affected by disruptions in the marketplace caused by economic and political conditions.

Global economic and political conditions affect our clients' businesses and the markets they serve. A severe and/or prolonged economic downturn or a negative or uncertain political climate could adversely affect our clients' financial condition and the levels of business activity engaged in by our clients and the industries we serve. Clients could determine that discretionary projects are no longer viable or that new projects are not advisable. This may reduce demand for our services, depress pricing for our services, or render certain services obsolete, all of which could have a material adverse effect on our results of operations. Changes in global economic conditions or the regulatory or legislative landscape could also shift demand to services for which we do not have competitive advantages, and this could negatively affect the amount of business that we are able to obtain. Although we have implemented cost management measures, if we are unable to appropriately manage costs or if we are unable to successfully anticipate changing economic and political conditions, we may be unable to effectively plan for and respond to those changes, and our business could be negatively affected.

THE ASPIRE CAPITAL TRANSACTION

General

On September 4, 2015, we entered into the Purchase Agreement which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $10.0 million of our shares of common stock over the term of the Purchase Agreement. In consideration for entering into the Purchase Agreement, concurrently with the execution of the Purchase Agreement, we issued to Aspire Capital the 300,000 Commitment Shares. Concurrently with entering into the Purchase Agreement, we also entered into the Registration Rights Agreement, in which we agreed to file one or more registration statements as permissible and necessary to register under the Securities Act, the sale of the shares of our common stock that have been and may be issued to Aspire Capital under the Purchase Agreement.

As of October 5, 2015, there were 18,523,423 shares of our common stock outstanding (17,626,275 shares held by non-affiliates). If all of such 5,730,200 shares of our common stock offered hereby were issued and outstanding as of the date hereof, such shares would represent 23.9% of the total common stock outstanding or 24.9% of the non-affiliate shares of common stock outstanding as of the date hereof. The aggregate number of shares that we can issue to Aspire Capital under the Purchase Agreement may in no case exceed 3,614,766 shares of our common stock (which is equal to approximately 19.99% of the common stock outstanding on the date of the Purchase Agreement), unless (i) stockholder approval is obtained to issue more than such 19.99%, or (ii) stockholder approval has not been obtained and at any time the 3,614,766 share limitation is reached and at all times thereafter the average price paid for all shares issued under the Purchase Agreement (including the 300,000 Commitment Shares) is equal to or greater than $0.95, the Minimum Price, a price equal to the closing sale price of our common stock on the business date of the execution of the Purchase Agreement; provided that at no one point in time shall Aspire Capital (together with its affiliates) beneficially own more than 19.99% of our then issued and outstanding shares of common stock.

Pursuant to the Purchase Agreement and the Registration Rights Agreement, we are registering 5,730,200 shares of our common stock under the Securities Act, which includes the 300,000 Commitment Shares that have already been issued to Aspire Capital and 5,430,200 shares of common stock which we may issue to Aspire Capital after this registration statement is declared effective under the Securities Act. All 5,730,200 shares of common stock are being offered pursuant to this prospectus. Under the Purchase Agreement, we have the right but not the obligation to issue more than the 5,730,200 shares of common stock included in this prospectus to Aspire Capital. As of the date hereof, we do not have any plans or intent to issue to Aspire Capital any shares of common stock in addition to the 5,730,200 shares of common stock offered hereby.

After the Securities and Exchange Commission has declared effective the registration statement of which this prospectus is a part, on any trading day on which the closing sale price of our common stock is not less than $0.10 per share, we have the right, in our sole discretion, to present Aspire Capital with a Purchase Notice, directing Aspire Capital (as principal) to purchase up to 100,000 shares of our common stock per business day, up to $10.0 million of our common stock in the aggregate at a Purchase Price calculated by reference to the prevailing market price of our common stock over the preceding 12-business day period (as more specifically described below).

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for 100,000 Purchase Shares and out stock price is not less than $0.10 per share, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of the Company's common stock traded on the NASDAQ Capital Market on the next trading day, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold. The VWAP Purchase Price is calculated by reference to the prevailing market price of our common stock (as more specifically described below).

There are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common stock to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. Aspire Capital may not assign its rights or obligations under the Purchase Agreement.

Purchase of Shares under the Purchase Agreement

Under the Purchase Agreement, on any trading day selected by us on which the closing sale price of our common stock equals or exceeds $0.10 per share, we may direct Aspire Capital to purchase up to 100,000 shares of our common stock per trading day. The Purchase Price of such shares is equal to the lesser of:

- the lowest sale price of our common stock on the purchase date; or
- the arithmetic average of the three lowest closing sale prices for our common stock during the twelve consecutive trading days ending on the trading day immediately preceding the purchase date.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for purchase of 100,000 shares, we also have the right to direct Aspire Capital to purchase an amount of stock equal to up to 30% of the aggregate shares of our common stock traded on the NASDAQ Capital Market on the next trading day, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold, which is equal to the greater of (a) 80% of the closing price of the Company's common stock on the business day immediately preceding the VWAP Purchase Date or (b) such higher price as set forth by the Company in the VWAP Purchase Notice. The VWAP Purchase Price of such shares is the lower of:

- the closing sale price on the VWAP Purchase Date; or
- 95% of the volume-weighted average price for our common stock traded on the NASDAQ Capital Market:
    - on the VWAP Purchase Date, if the aggregate shares to be purchased on that date have not exceeded the VWAP Purchase Share Volume Maximum; or
    - during that portion of the VWAP Purchase Date until such time as the sooner to occur of (i) the time at which the aggregate shares traded on the NASDAQ Capital Market exceed the VWAP Purchase Share Volume Maximum or (ii) the time at which the sale price of the Company's common stock falls below the VWAP Minimum Price Threshold.

The purchase price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the trading day(s) used to compute the purchase price. We may deliver multiple Purchase Notices and VWAP Purchase Notices to Aspire Capital from time to time during the term of the Purchase Agreement, so long as the most recent purchase has been completed.

Minimum Share Price

Under the Purchase Agreement, we and Aspire Capital may not effect any sales of shares of our common stock under the Purchase Agreement on any trading day that the closing sale price of our common stock is less than $0.10 per share.

Events of Default

Generally, Aspire Capital may terminate the Purchase Agreement upon the occurrence of any of the following events of default:

- the effectiveness of any registration statement that is required to be maintained effective pursuant to the terms of the Registration Rights Agreement between us and Aspire Capital lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable to Aspire Capital for sale of our shares of common stock, and such lapse or unavailability continues for a period of ten consecutive business days or for more than an aggregate of thirty business days in any 365-day period, which is not in connection with a post-effective amendment to any such registration statement; in connection with any post-effective amendment to such registration statement that is required to be declared effective by the SEC, such lapse or unavailability may continue for a period of no more than 30 consecutive business days, with an extension for up to an additional 30 days if we receive a comment letter from the SEC in connection with such post- effective amendment;

- the suspension from trading or failure of our common stock to be listed on our principal market for a period of three consecutive business days;

- the delisting of our common stock from the NASDAQ Capital Market, and the Company's common stock is not immediately thereafter trading on the New York Stock Exchange, the NYSE MKT, the Nasdaq Global Select Market, the Nasdaq Global Market, the OTB Bulletin Board or the OTCQB marketplace or OTCQX marketplace of the OTC Markets Group;

- our transfer agent's failure to issue to Aspire Capital shares of our common stock which Aspire Capital is entitled to receive under the Purchase Agreement within five business days after an applicable purchase date;

- any breach by us of any representation, warranty, covenant or other term or condition contained in the Purchase Agreement or any related agreement which could have a material adverse effect on us, subject to a cure period of five business days;

- if we become insolvent or are generally unable to pay our debts as they become due;

- any participation or threatened participation in insolvency or bankruptcy proceedings by or against us; or

- if the aggregate number of shares of common stock issued to Aspire Capital under the Purchase Agreement exceeds 3,614,766 (which is equal to approximately 19.99% of the common stock outstanding on the date of the Purchase Agreement), unless and until stockholder approval is obtained or we can otherwise continue to issue shares under the Purchase Agreement without breaching the Company's obligations under the rules or regulations of the NASDAQ Capital Market.

Our Termination Rights

The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

No Short-Selling or Hedging by Aspire Capital

Aspire Capital has agreed that neither it nor any of its agents, representatives and affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the Purchase Agreement.

Effect of Performance of the Purchase Agreement on Our Stockholders

The Purchase Agreement does not limit the ability of Aspire Capital to sell any or all of the 5,730,200 shares registered in this offering. It is anticipated that shares registered in this offering will be sold over a period of up to approximately 24 months from the date of this prospectus. The sale by Aspire Capital of a significant amount of shares registered in this offering at any given time could cause the market price of our common stock to decline and/or to be highly volatile. Aspire Capital may ultimately purchase all, some or none of the 5,430,200 shares of common stock not yet issued but registered in this offering. After it has acquired such shares, it may sell all, some or none of such shares. Therefore, sales to Aspire Capital by us pursuant to the Purchase Agreement also may result in substantial dilution to the interests of other holders of our common stock. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any penalty or cost to us.

Percentage of Outstanding Shares After Giving Effect to the Purchased Shares Issued to Aspire Capital

In connection with entering into the Purchase Agreement, we authorized the sale to Aspire Capital of up to $10.0 million of our shares of common stock. However, we estimate that we will sell no more the 5,730,200 shares to Aspire Capital under the Purchase Agreement (including the 300,000 Commitment Shares), all of which are included in this offering. Subject to any required approval by our board of directors, we have the right but not the obligation to issue more than the 5,730,200 shares included in this prospectus to Aspire Capital under the Purchase Agreement. In the event we elect to issue more than 5,730,200 shares under the Purchase Agreement, we will be required to file a new registration statement and have it declared effective by the SEC. The number of shares ultimately offered for sale by Aspire Capital in this offering is dependent upon the number of shares purchased by Aspire Capital under the Purchase Agreement. The following table sets forth the number and percentage of outstanding shares to be held by Aspire Capital after giving effect to the sale of shares of common stock issued to Aspire Capital at varying purchase prices:

Assumed Average Purchase Price	Shares to Aspire Capital Under the Purchase Agreement Registered in this Offering	Number of Shares to be Issued in this Offering at the Assumed Average Purchase Price (1)	Percentage of Outstanding Shares After Giving Effect to the Purchased Shares Issued to Aspire Capital (2)
$0.10	$543,020	5,430,200	23.9%
$0.50	$2,715,000	5,430,200	23.9%
$1.00	$5,430,200	5,430,200	23.9%
$2.00	$10,000,000	5,000,000	22.5%
$4.00	$10,000,000	2,500,000	13.3%

(1) Excludes the 300,000 Commitment Shares issued under the Purchase Agreement between the Company and Aspire Capital.

(2) The denominator is based on 18,523,423 shares outstanding as of October 5, 2015, which includes the 300,000 Commitment Shares issued to Aspire Capital, and the number of shares set forth in the adjacent column which we would have sold to Aspire Capital at the corresponding assumed purchase price set forth in the adjacent column. The numerator is based on the number of shares which we may issue to Aspire Capital under the Purchase Agreement that are included in this prospectus at the corresponding assumed purchase price set forth in the adjacent column.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by Aspire Capital. We will not receive any proceeds upon the sale of shares by Aspire Capital. However, we may receive proceeds up to $10.0 million under the Purchase Agreement with Aspire Capital. The proceeds received from the sale of the shares under the Purchase Agreement will be used for working capital and general corporate purposes. This anticipated use of net proceeds from the sale of our common stock to Aspire Capital under the Purchase Agreement represents our intentions based upon our current plans and business conditions.

PRICE RANGE OF COMMON STOCK AND DIVIDEND POLICY

Our common stock is traded on the NASDAQ Capital Market under the symbol "LTBR." The last reported sale price of our common stock on October 15, 2015 on the NASDAQ Capital Market was $1.03 per share. The following table sets forth the high and low sale prices for our common stock for the periods indicated as reported on the NASDAQ Capital Market.

	High	Low
Year Ended December 31, 2013:		
First Quarter	$2.50	$1.29
Second Quarter	$1.85	$1.35
Third Quarter	$3.28	$1.50
Fourth Quarter	$2.25	$1.32
Year Ended December 31, 2014:		
First Quarter	$3.79	$1.47
Second Quarter	$2.88	$1.94
Third Quarter	$3.54	$2.25
Fourth Quarter	$2.37	$1.52
Year Ended December 31, 2015:		
First Quarter	$1.84	$1.03
Second Quarter	$2.92	$1.09
Third Quarter	$1.41	$0.75
Fourth Quarter (through October 15, 2015)	$1.06	$0.75

As of October 15, 2015, there were approximately 109 holders of record of our common stock.

We have never declared or paid cash dividends. We currently intend to retain and use any future earnings for the development and expansion of our business and do not plan to pay any cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our board of directors.

DILUTION

If you acquire shares of our common stock from Aspire Capital in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share and the as adjusted net tangible book value per share after giving effect to this offering. We calculate net tangible book value per share by dividing the net tangible book value, which is tangible assets less total liabilities, by the number of outstanding shares of our common stock. Dilution represents the difference between the portion of the amount per share paid by purchasers of shares in this offering and the as-adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. Our net tangible book value as of June 30, 2015 was approximately $2.7 million, or $0.15 per share.

After giving effect to (i) the issuance of the 300,000 Commitment Shares, and (ii) the sale of 3,314,766 shares of common stock (the maximum number of additional Purchase Shares that can be sold so as not to exceed 19.99% of our outstanding common stock on the date of the Purchase Agreement) in the aggregate amount of $3.1 million at an assumed offering price of $0.95 per share, the last reported sale price of our common stock on the NASDAQ Capital Market on October 9, 2015, and after deducting estimated aggregate offering expenses payable by us, our net tangible book value as of June 30, 2015 would have been approximately $5.8 million, or $0.27 per share of common stock. This represents an immediate increase in the net tangible book value of $0.12 per share to our existing stockholders and an immediate dilution in net tangible book value of $0.68 per share to investors participating in this offering.

The following table illustrates this per share dilution:

Assumed offering price per share		$ 0.95
Net tangible book value per share as of June 30, 2015	$ 0.15	
Increase per share attributable to investors participating in this offering	$ 0.12	
As adjusted net tangible book value per share as of June 30, 2015, after giving effect to this offering		0.27
Dilution per share to investors participating shares in this offering		$ 0.68

The shares sold in this offering (including the 300,000 Commitment Shares), if any, will be sold from time to time at various prices. An increase of $0.25 per share in the price at which the shares are sold from the assumed offering price of $0.95 per share shown in the table above, assuming 3,314,766 shares of common stock (the maximum number of additional Purchase Shares that can be sold so as not to exceed 19.99% of our outstanding common stock on the date of the Purchase Agreement) are sold at that price for an aggregate amount of approximately $4.0 million, would result in an adjusted net tangible book value per share after the offering of $0.31 per share and would increase the dilution in net tangible book value per share to investors in this offering to $0.89 per share, after deducting estimated aggregate offering expenses payable by us. A decrease of $0.25 per share in the price at which the shares are sold from the assumed offering price of $0.95 per share shown in the table above, assuming 3,314,766 shares of common stock are sold at that price for an aggregate amount of approximately $2.3 million, would result in an adjusted net tangible book value per share after the offering of $0.23 per share and would decrease the dilution in net tangible book value per share to investors in this offering to $0.47 per share, after deducting estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The foregoing table and discussion is based on 18,082,874 shares of common stock outstanding as of June 30, 2015 and assumes no exercise of any outstanding options or warrants. To the extent that options or warrants are exercised, there may be further dilution to new investors.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our articles of incorporation, bylaws and the Nevada corporations law are summaries and are qualified in their entirety by reference to the articles of incorporation and the bylaws. We have filed copies of these documents with the SEC as exhibits to our registration statement, of which this prospectus forms a part. Pursuant to the Company's Articles of Incorporation, as amended, the Company's authorized capital stock consists of 500,000,000 shares of common stock, par value of $0.001 per share, and 50,000,000 shares of preferred stock, par value $0.001 per share, to be designated from time to time by our board.

Common Stock

We are authorized to issue up to 500,000,000 shares of common stock, par value $0.001 per share. Each outstanding share of common stock entitles the holder thereof to one vote per share on all matters. Our bylaws provide that elections for directors shall be by a plurality of votes. Stockholders do not have preemptive rights to purchase shares in any future issuance of our common stock. Upon our liquidation, dissolution or winding up, and after payment of creditors and preferred stockholders, if any, our assets will be divided pro-rata on a share-for-share basis among the holders of the shares of common stock.

The holders of shares of our common stock are entitled to dividends out of funds legally available when and as declared by our board of directors. Our board of directors has never declared a dividend and does not anticipate declaring a dividend in the foreseeable future. Should we decide in the future to pay dividends, as a holding company, our ability to do so and meet other obligations depends upon the receipt of dividends or other payments from our operating subsidiary and other holdings and investments. In addition, our operating subsidiary, from time to time, may be subject to restrictions on its ability to make distributions to us, including as a result of restrictive covenants in loan agreements, restrictions on the conversion of local currency into U.S. dollars or other hard currency and other regulatory restrictions.

All of the issued and outstanding shares of our common stock are duly authorized, validly issued, fully paid and non-assessable. To the extent that additional shares of our common stock are issued, the relative interests of existing stockholders will be diluted.

As of October 5, 2015, there were 18,523,423 shares of our common stock outstanding.

Preferred Stock

We are authorized to issue up to 50,000,000 shares of preferred stock, par value $0.001 per share, in one or more classes or series within a class as may be determined by our board of directors, who may establish, from time to time, the number of shares to be included in each class or series, may fix the designation, powers, preferences and rights of the shares of each such class or series and any qualifications, limitations or restrictions thereof. Any preferred stock so issued by the board of directors may rank senior to the common stock with respect to the payment of dividends or amounts upon liquidation, dissolution or winding up of us, or both. Moreover, under certain circumstances, the issuance of preferred stock or the existence of the unissued preferred stock might tend to discourage or render more difficult a merger or other change of control.

As of October 5, 2015, there were no shares of our preferred stock outstanding.

Anti-Takeover Effects of Our Articles of Incorporation and Bylaws

Our articles of incorporation and bylaws contain certain provisions that may have anti-takeover effects, making it more difficult for or preventing a third party from acquiring control of the Company or changing its board of directors and management. According to our articles of incorporation and bylaws, neither the holders of our common stock nor the holders of any preferred stock we may issue in the future have cumulative voting rights in the election of our directors. The combination of the present ownership by a few stockholders of a significant portion of our issued and outstanding common stock and lack of cumulative voting makes it more difficult for other stockholders to replace our board of directors or for a third party to obtain control of the Company by replacing its board of directors.

Anti-Takeover Effects of Nevada Law

Business Combinations

The "business combination" provisions of Sections 78.411 to 78.444, inclusive, of the Nevada Revised Statutes, or NRS, generally prohibit a Nevada corporation with at least 200 stockholders from engaging in various "combination" transactions with any interested stockholder for a period of two years after the date of the transaction in which the person became an interested stockholder, unless the transaction is approved by the board of directors prior to the date the interested stockholder obtained such status or the combination is approved by the board of directors and thereafter is approved at a meeting of the stockholders by the affirmative vote of stockholders representing at least 60% of the outstanding voting power held by disinterested stockholders, and extends beyond the expiration of the two-year period, unless:

- the combination was approved by the board of directors prior to the person becoming an interested stockholder or the transaction by which the person first became an interested stockholder was approved by the board of directors before the person became an interested stockholder or the combination is later approved by a majority of the voting power held by disinterested stockholders; or

- if the consideration to be paid by the interested stockholder is at least equal to the highest of: (a) the highest price per share paid by the interested stockholder within the two years immediately preceding the date of the announcement of the combination or in the transaction in which it became an interested stockholder, whichever is higher, (b) the market value per share of common stock on the date of announcement of the combination and the date the interested stockholder acquired the shares, whichever is higher, or (c) for holders of preferred stock, the highest liquidation value of the preferred stock, if it is higher.

A "combination" is generally defined to include mergers or consolidations or any sale, lease exchange, mortgage, pledge, transfer, or other disposition, in one transaction or a series of transactions, with an "interested stockholder" having: (a) an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation, (b) an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation, (c) 10% or more of the earning power or net income of the corporation, and (d) certain other transactions with an interested stockholder or an affiliate or associate of an interested stockholder.

In general, an "interested stockholder" is a person who, together with affiliates and associates, owns (or within two years, did own) 10% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire our Company even though such a transaction may offer our stockholders the opportunity to sell their stock at a price above the prevailing market price.

Our articles of incorporation state that we have elected not to be governed by the "business combination" provisions, therefore such provisions currently do not apply to us.

Control Share Acquisitions

The "control share" provisions of Sections 78.378 to 78.3793, inclusive, of the NRS apply to "issuing corporations" that are Nevada corporations with at least 200 stockholders, including at least 100 stockholders of record who are Nevada residents, and that conduct business directly or indirectly in Nevada. The control share statute prohibits an acquirer, under certain circumstances, from voting its shares of a target corporation's stock after crossing certain ownership threshold percentages, unless the acquirer obtains approval of the target corporation's disinterested stockholders. The statute specifies three thresholds: one-fifth or more but less than one-third, one-third but less than a majority, and a majority or more, of the outstanding voting power. Generally, once an acquirer crosses one of the above thresholds, those shares in an offer or acquisition and acquired within 90 days thereof become "control shares" and such control shares are deprived of the right to vote until disinterested stockholders restore the right. These provisions also provide that if control shares are accorded full voting rights and the acquiring person has acquired a majority or more of all voting power, all other stockholders who do not vote in favor of authorizing voting rights to the control shares are entitled to demand payment for the fair value of their shares in accordance with statutory procedures established for dissenters' rights.

A corporation may elect to not be governed by, or "opt out" of, the control share provisions by making an election in its articles of incorporation or bylaws, provided that the opt-out election must be in place on the 10th day following the date an acquiring person has acquired a controlling interest, that is, crossing any of the three thresholds described above. We have not opted out of the control share statutes, and will be subject to these statutes if we are an "issuing corporation" as defined in such statutes.

The effect of the Nevada control share statutes is that the acquiring person, and those acting in association with the acquiring person, will obtain only such voting rights in the control shares as are conferred by a resolution of the stockholders at an annual or special meeting. The Nevada control share law, if applicable, could have the effect of discouraging takeovers of our Company.

Transfer Agent and Registrar

Our independent stock transfer agent is Computershare Trust Company, located at 350 Indiana Street, Golden, Colorado 80401. Their phone number is (303) 262-0600.

SELLING SHAREHOLDER

The selling shareholder may from time to time offer and sell any or all of the shares of our common stock set forth below pursuant to this prospectus. When we refer to the "selling shareholder" in this prospectus, we mean the entity listed in the table below, and its respective pledgees, donees, permitted transferees, assignees, successors and others who later come to hold any of the selling shareholder's interests in shares of our common stock other than through a public sale.

The following table sets forth, as of the date of this prospectus, the name of the selling shareholder for whom we are registering shares for sale to the public, the number of shares of common stock beneficially owned by the selling shareholder prior to this offering, the total number of shares of common stock that the selling shareholder may offer pursuant to this prospectus and the number of shares of common stock that the selling shareholder will beneficially own after this offering. Except as noted below, the selling shareholder does not have, or within the past three years has not had, any material relationship with us or any of our predecessors or affiliates and the selling shareholder is not or was not affiliated with registered broker-dealers.

Based on the information provided to us by the selling shareholder, assuming that the selling shareholder sells all of the shares of our common stock beneficially owned by it that have been registered by us and does not acquire any additional shares during the offering, the selling shareholder will not own any shares other than those appearing in the column entitled "Shares Beneficially Owned After Offering." We cannot advise you as to whether the selling shareholder will in fact sell any or all of such shares of common stock. In addition, the selling shareholder may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the shares of our common stock in transactions exempt from the registration requirements of the Securities Act after the date on which it provided the information set forth in the table below.

Name	Shares Beneficially Owned Prior to Offering		Number of Shares Being Offered	Shares Beneficially Owned After Offering(1)	
	Number	%		Number	%
Aspire Capital Fund, LLC(2)	400,966 (3)	2.2%	5,730,200	100,966	*%

* Less than 1%.

(1) Assumes the sale of all shares of common stock registered pursuant to this prospectus, although the selling shareholder is under no obligation known to us to sell any shares of common stock at this time.

(2) Aspire Capital Partners LLC (Aspire Partners) is the Managing Member of Aspire Capital Fund LLC (Aspire Capital). SGM Holdings Corp (SGM) is the Managing Member of Aspire Partners. Mr. Steven G. Martin is the president and sole shareholder of SGM, as well as a principal of Aspire Partners. Mr. Erik J. Brown is the president and sole shareholder of Red Cedar Capital Corp (Red Cedar), which is a principal of Aspire Partners. Mr. Christos Komissopoulos is president and sole shareholder of Chrisko Investors Inc. (Chrisko), which is a principal of Aspire Partners. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos may be deemed to be a beneficial owner of common stock held by Aspire Capital. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos disclaims beneficial ownership of the common stock held by Aspire Capital. Aspire Capital is not a licensed broker dealer nor is any of its affiliate a licensed broker dealer.

(3) As of the date hereof, 400,966 shares of our common stock have been acquired by Aspire Capital, including 100,966 shares that Aspire Capital purchased in the open market and 300,000 shares acquired under the Purchase Agreement, consisting of the shares we issued to Aspire Capital as a commitment fee. We may elect in our sole discretion to sell to Aspire Capital up to an additional 5,430,200 shares under the Purchase Agreement and included in this prospectus but Aspire Capital does not presently beneficially own those shares as determined in accordance with the rules of the SEC.

PLAN OF DISTRIBUTION

The common stock offered by this prospectus is being offered by Aspire Capital, the selling shareholder. The common stock may be sold or distributed from time to time by the selling shareholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the common stock offered by this prospectus may be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- "at the market" into an existing market for the common stock;
- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

The selling shareholder may also sell shares of common stock under Rule 144 promulgated under the Securities Act, if available, rather than under this prospectus. In addition, the selling shareholder may transfer the shares of common stock by other means not described in this prospectus.

Brokers, dealers, underwriters, or agents participating in the distribution of the shares as agents may receive compensation in the form of commissions, discounts, or concessions from the selling shareholder and/or purchasers of the common stock for whom the broker-dealers may act as agent. Aspire Capital has informed us that each such broker-dealer will receive commissions from Aspire Capital which will not exceed customary brokerage commissions.

Aspire Capital is an "underwriter" within the meaning of the Securities Act.

Neither we nor Aspire Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Aspire Capital, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any compensation from the selling shareholder, and any other required information. Pursuant to a requirement of the Financial Industry Regulatory Authority, or FINRA, the maximum commission or discount and other compensation to be received by any FINRA member or independent broker-dealer shall not be greater than eight percent (8%) of the gross proceeds received by us for the sale of any securities being registered pursuant to Rule 415 under the Securities Act.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to the public other than commissions or discounts of underwriters, broker-dealers, or agents. We have agreed to indemnify Aspire Capital and certain other persons against certain liabilities in connection with the offering of shares of common stock offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Aspire Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Aspire Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Aspire Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the Purchase Agreement.

We have advised Aspire Capital that while it is engaged in a distribution of the shares included in this prospectus it is required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

We may suspend the sale of shares by Aspire Capital pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all shares offered by this prospectus have been sold by Aspire Capital.

LEGAL MATTERS

Gary R. Henrie, Las Vegas, Nevada, has passed upon the validity of the common stock offered hereby.

EXPERTS

The consolidated financial statements of the Company for the years ended December 31, 2014 and 2013 incorporated in this prospectus by reference have been audited by Anderson Bradshaw PLLC, an independent registered public accounting firm, and are incorporated in reliance upon their report dated March 25, 2015, given upon such firm's authority as experts in auditing and accounting.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are subject to the reporting requirements of the Exchange Act and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's website at *www.sec.gov*.

This prospectus forms part of a registration statement on Form S-1 filed by us with the SEC under the Securities Act. As permitted by the SEC, this prospectus does not contain all the information in the registration statement filed with the SEC. For a more complete understanding of this offering, you should refer to the complete registration statement, including the exhibits thereto, on Form S-1 that may be obtained as described above. Statements contained or incorporated by reference in this prospectus or any prospectus supplement about the contents of any contract or other document are not necessarily complete. If we have filed any contract or other document as an exhibit to the registration statement or any other document incorporated by reference in the registration statement of which this prospectus forms a part, you should read the exhibit for a more complete understanding of the document or matter involved. Each statement regarding a contract or other document is qualified in its entirety by reference to the actual document.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" in this prospectus certain of the information we file with the SEC. This means we can disclose important information to you by referring you to another document that has been filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus. We incorporate by reference the documents listed below that we have previously filed with the SEC, except we are not incorporating by reference any information furnished (but not filed) under Item 2.02 or Item 7.01 of any Current Report on Form 8-K and corresponding information furnished under Item 9.01 as an exhibit thereto:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, filed on March 25, 2015, as amended by the Form 10-K/A filed on April 30, 2015;
- our Proxy Statement for our 2015 Annual Meeting of Stockholders, filed on June 12, 2015;
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015, and the quarter ended June 30, 2015, filed on August 19, 2015;
- our Current Reports on Form 8-K filed on January 30, 2015, March 27, 2015, April 10, 2015, April 13, 2015, May 18, 2015, June 10, 2015, June 12, 2015, July 20, 2015, September 8, 2015 and September 14, 2015; and
- the description of our common stock contained in our Registration Statement on Form 8-A filed on July 18, 2006, including any amendments or reports filed for the purpose of updating such description.

Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide a copy of any or all of the documents incorporated herein by reference upon written or oral request from any person, including any beneficial owner, to whom a prospectus is delivered. These documents will be provided to you at no cost by contacting: Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia, 22102; telephone number: (571) 730-1200. You may also access the documents incorporated by reference in this prospectus through our website at *www.ltbridge.com*. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

5,730,200 Shares

Common Stock

PROSPECTUS

, 2015

PART II — INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses payable by the Company in connection with the registration and sale of the common stock being registered. All the amounts shown are estimates except the SEC registration fee.

SEC registration fee	$560
Printing expense	5,000
Legal fees and expenses	30,000
Accounting fees and expenses	5,000
Transfer agent fees	2,000
Miscellaneous fees and expenses	2,440
Total Expenses	$45,000

Item 14. Indemnification of Directors and Officers

We are a Nevada corporation and generally governed by the Nevada Private Corporations Code, Title 78 of the Nevada Revised Statutes, or NRS.

Section 78.138 of the NRS provides that, unless the corporation's articles of incorporation provide otherwise, a director or officer will not be individually liable unless it is proven that (i) the director's or officer's acts or omissions constituted a breach of his or her fiduciary duties, and (ii) such breach involved intentional misconduct, fraud or a knowing violation of the law.

Section 78.7502 of the NRS permits a Nevada corporation to indemnify its directors and officers against expenses, judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with a threatened, pending, or completed action, suit, or proceeding, except an action by or on behalf of the corporation, if the officer or director (i) is not liable pursuant to NRS 78.138, or (ii) acted in good faith and in a manner the officer or director reasonably believed to be in or not opposed to the best interests of the corporation and, if a criminal action or proceeding, had no reasonable cause to believe the conduct of the officer or director was unlawful. Section 78.7502 of the NRS also requires a corporation to indemnify its officers and directors if they have been successful on the merits or otherwise in defense of any claim, issue, or matter resulting from their service as a director or officer.

Section 78.751 of the NRS permits a Nevada corporation to indemnify its officers and directors against expenses incurred by them in defending a civil or criminal action, suit, or proceeding as they are incurred and in advance of final disposition thereof, upon determination by the stockholders, the disinterested board members, or by independent legal counsel. Section 78.751 of NRS requires a corporation to advance expenses as incurred upon receipt of an undertaking by or on behalf of the officer or director to repay the amount if it is ultimately determined by a court of competent jurisdiction that such officer or director is not entitled to be indemnified by the corporation if so provided in the corporation's articles of incorporation, bylaws, or other agreement. Section 78.751 of the NRS further permits the corporation to grant its directors and officers additional rights of indemnification under its articles of incorporation, bylaws or other agreement.

Section 78.752 of the NRS provides that a Nevada corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another company, partnership, joint venture, trust or other enterprise, for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses.

Our Articles of Incorporation and Bylaws implement the indemnification and insurance provisions permitted by Chapter 78 of the NRS by providing that:

- We shall indemnify our directors and officers to the fullest extent permitted by the NRS against expense, liability and loss reasonably incurred or suffered by them in connection with their service as an officer or director; and

- We may purchase and maintain insurance, or make other financial arrangements, on behalf of any person who holds or who has held a position as a director, officer, or representative against liability, cost, payment, or expense incurred by such person.

At the present time, there is no pending litigation or proceeding involving a director, officer, employee or other agent of ours in which indemnification would be required or permitted. We are not aware of any threatened litigation or proceeding which may result in a claim for such indemnification.

Item 15. Recent Sales of Unregistered Securities

Aspire Capital Transaction

On September 4, 2015, the Company entered into a Common Stock Purchase Agreement, or the Purchase Agreement, with Aspire Capital Fund, LLC, an Illinois limited liability company, or Aspire Capital, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $10.0 million of shares of the Company's common stock (the "Purchase Shares") over the 24-month term of the Purchase Agreement.

Upon execution of the Purchase Agreement, the Company issued 300,000 shares of its common stock to Aspire Capital in consideration for entering into the Purchase Agreement. The Purchase Shares may be sold by the Company to Aspire Capital on any business day the Company selects in two ways: (1) through a regular purchase of up to 100,000 shares at a known price based on the market price of our common stock prior to the time of each sale, and (2) through a VWAP purchase of a number of shares up to 30% of the volume traded on the purchase date at a price equal to the lessor of the closing sale price or 95% of the volume weighted average price for such purchase date.

The issuance of the 300,000 Commitment Shares and all other shares of common stock that may be issued from time to time to Aspire Capital under the Purchase Agreement is exempt from registration under the Securities Act of 1933, as amended (the "Securities Act"), pursuant to the exemption for transactions by an issuer not involving any public offering under Section 4(a)(2) of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules

The list of exhibits in the Exhibit Index to this registration statement is incorporated herein by reference.

Item 17. Undertakings

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 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 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.

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:

(a) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(b) To reflect in the prospectus any facts or events arising after the effective date of the 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 the 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

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

(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 this offering.

(4) That, for the purpose of determining liability under the Securities Act to any purchaser: each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness; 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 first use, 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 date of first use.

(5) That, for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of McLean, Commonwealth of Virginia, on October 19, 2015.

Lightbridge Corporation

By:/s/Seth Grae
Seth Grae
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Seth Grae and Linda Zwobota, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this registration statement (and any registration statement filed pursuant to Rule 462(b) under the Securities Act, as amended, for the offering which this registration statement relates), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his or her substitute or substitutes, may 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 by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Seth Grae Seth Grae	President, Chief Executive Officer and Director (Principal Executive Officer)	October 19, 2015
/s/ Linda Zwobota Linda Zwobota	Chief Financial Officer (Principal Financial and Accounting Officer)	October 19, 2015
/s/Thomas Graham, Jr. Thomas Graham, Jr.	Chairman and Director	October 19, 2015
/s/Victor E. Alessi Victor E. Alessi	Director	October 19, 2015
/s/Kathleen Kennedy Townsend Kathleen Kennedy Townsend	Director	October 19, 2015
/s/Daniel B. Magraw Daniel B. Magraw	Director	October 19, 2015

EXHIBIT INDEX

Exhibit No.	Description
3.1	Articles of Incorporation of the Company as filed with the Secretary of State of Nevada (incorporated by reference to Exhibit 3.1 to the Company's registration statement on Form SB-2 filed on December 11, 2001, File No. 333-74914).
3.2	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on February 13, 2006).
3.3	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Appendix A to the Company's definitive information statement on Schedule 14C filed on July 31, 2006).
3.4	Certificate of Amendment to Articles of Incorporation (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on September 25, 2009).
3.5	Amended and Restated Bylaws of the Company (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on July 9, 2007).
4.1	Registration Rights Agreement, dated September 4, 2015, between the Company and Aspire Capital Fund, LLC (incorporated by reference to Exhibit 4.1 the Company's Current Report on Form 8-K filed on September 8, 2015).
4.2	Form of Common Stock Purchase Warrant (incorporated by reference to Exhibit 4.1 the Company's Current Report on Form 8-K filed on November 12, 2014).
4.3	Specimen Certificate for the Company's Common Stock (incorporated by reference to Exhibit 4.1 to the Company's registration statement on Form S-3 filed on April 1, 2013, File No. 333-187659).
5.1*	Opinion of Gary R. Henrie, Esq.
10.1	2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 21, 2006).
10.2	2015 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 20, 2015).
10.3	Employment Agreement, dated as of February 14, 2006, between the Company and Seth Grae (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on February 21, 2006).
10.4	Employment Agreement, dated July 27, 2006, between the Company and Andrey Mushakov (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on August 4, 2006).
10.5	Independent Director Contract, dated August 21, 2006, between the Company and Victor Alessi (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 25, 2006).
10.6	Independent Director Contract, dated October 10, 2013, between the Company and Kathleen Kennedy Townsend (incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K filed on March 27, 2014).
10.7	Independent Director Contract, dated October 23, 2006, between the Company and Daniel B. Magraw (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8- K, filed on October 23, 2006).
10.8	Restricted Stock Grant Agreement, dated July 14, 2009, between Seth Grae and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 20, 2009).

Exhibit No.	Description
10.9	Stock Option Agreement, dated July 14, 2009, between Seth Grae and the Company (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 20, 2009).
10.10	Collaboration Framework Agreement, dated August 3, 2009, between the Company and AREVA (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on August 6, 2009).
10.11	Common Stock Purchase Agreement, dated September 4, 2015, between the Company and Aspire Capital Fund, LLC (incorporated by reference to the Company's Current Report on Form 8-K filed on September 8, 2015).
23.1*	Consent of Anderson Bradshaw PLLC.
23.2*	Consent of Gary R. Henrie, Esq. (included in Exhibit 5.1).
24	Power of Attorney (included on signature page hereof).

* Filed herewith.

Gary R. Henrie
Attorney at Law
Licensed in the States of Utah and Nevada

486 W. 1360 N.
American Fork, UT 84003

Telephone: 801-310-1419
e-mail: grhlaw@hotmail.com

October 19, 2015

Lightbridge Corporation
1600 Tysons Blvd., Suite 550
McLean, Virginia 22102

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We are acting as special Nevada counsel for Lightbridge Corporation, a Nevada corporation (the "**Company**"), in connection with the registration statement on Form S-1 (the "**Registration Statement**") filed by the Company with the Securities and Exchange Commission (the "**Commission**") under the Securities Act of 1933, as amended (the "**Act**"), relating to the proposed public offering of up to 5,730,200 shares of the Company's common stock, $0.001 par value per share (the "**Shares**"), 5,430,200 of which are reserved for issuance pursuant to a common stock purchase agreement dated September 4, 2015 (the "**Purchase Agreement**") between the Company and Aspire Capital Fund, LLC ("**Aspire Capital**").

We have reviewed and are familiar with such corporate proceedings and other matters as we have deemed necessary for this opinion.

In rendering the opinions set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; (v) the Registration Statement, and any amendments thereto (including post-effective amendments) will have become effective and comply with all applicable laws; (vi) all of the Shares will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Purchase Agreement, the Registration Statement and any applicable prospectus supplement; (vii) there will not have occurred any change in law affecting the validity or enforceability of such Shares; (viii) at the time of the sale, issuance or delivery of the Shares, the authorization of such Shares by the Company's Board of Directors or applicable committee thereof will not have been modified or rescinded; (ix) with respect to the Shares, the Company will have a sufficient number of authorized but unissued shares thereof under its charter, and will have reserved from such authorized but unissued and unreserved shares, sufficient shares for the issuance thereof; (x) the certificates representing the Shares will be duly authorized, executed and delivered; and (xi) the Shares will be properly authenticated by the manual signature of an authorized representative of the transfer agent.

Based upon the foregoing, we are of the opinion that:

(a) the 300,000 Shares that have already been issued by the Company to Aspire Capital are validly issued, fully paid and nonassessable; and

(b) the 5,430,200 Shares, when sold and issued by the Company to Aspire Capital in accordance with the terms of the Purchase Agreement, will be validly issued, fully paid and nonassessable, provided that (i) the Company's Board of Directors or an authorized committee thereof has specifically authorized the issuance of such Shares in exchange for a consideration that the Board of Directors or such committee determines as adequate ("**Authorizing Resolutions**"), (ii) the offer and sale of the Shares and the issuance and delivery thereof are in conformity with the Company's charter and bylaws, and do not violate any applicable law, or result in a default under or breach of any agreement or instrument binding on the Company or a violation of any restriction imposed by any court or governmental body having jurisdiction over the Company and (iii) the Company has received the consideration provided for in the applicable Authorizing Resolutions.

The foregoing opinion is qualified to the extent that the enforceability of any document or instrument may be limited by or subject to bankruptcy, insolvency, receivership, fraudulent transfer or conveyance, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and general equitable or public policy principles.

In providing this opinion, we have relied as to certain matters on information obtained from public officials and officers or agents of the Company.

It is understood that this opinion is to be used only in connection with the Registration Statement.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is limited to matters governed by the Nevada Revised Statutes (including the statutory provisions and reported judicial decisions interpreting such law) and the laws of the State of Nevada. We disclaim any obligation to update this opinion or otherwise advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein, nor do we deliver any opinion as to the extent to which any laws other than the laws of the State of Nevada apply or the effect of any such other laws should they apply.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption “Legal Matters” in the Registration Statement and in the prospectus forming part of the Registration Statement and any supplement thereto. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Sincerely,

/s/Gary R. Henrie

Gary R. Henrie

ANDERSON BRADSHAW PLLC

CERTIFIED PUBLIC ACCOUNTANTS

Russell E. Anderson, CPA
Russ Bradshaw, CPA
William R. Denney, CPA

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Lightbridge Corporation
1600 Tysons Boulevard, Suite 550
McLean, VA 22102

We hereby consent to the use of our report dated March 25, 2015, with respect to the financial statements of Lightbridge Corporation incorporated by reference in the Registration Statement on Form S-1 to be filed on or about October 16, 2015. We also consent to the use of our name and the reference to us in the Experts section of the Registration Statement.

/s/ Anderson Bradshaw PLLC

Anderson Bradshaw PLLC
Salt Lake City, Utah
October 16, 2015

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