

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 14A INFORMATION

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
 Confidential, For Use of the Commission Only (As Permitted by Rule 14a-6(e)(2))
 Definitive Proxy Statement
 Definitive Additional Materials
 Soliciting Material under Rule 14a-12

LIGHTBRIDGE CORPORATION

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required
 Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

- (1) Title of each class of securities to which transaction applies: _____
(2) Aggregate number of securities to which transaction applies: _____
(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): _____
(4) Proposed maximum aggregate value of transaction: _____
(5) Total fee paid: _____

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the form or schedule and the date of its filing.

- (1) Amount Previously Paid: _____
(2) Form, Schedule or Registration Statement No.: _____
(3) Filing Party: _____
(4) Date Filed: _____
-



Lightbridge Corporation
1600 Tysons Boulevard, Suite 550
McLean, VA 22102 USA
571.730.1200

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

APRIL 30, 2010

Dear Stockholder:

Notice is hereby given that the Annual Meeting of Stockholders (the "Meeting") of Lightbridge Corporation, a Nevada corporation (the "Company"), will be held on Friday, April 30, 2010, at 11:00 a.m., local time, at the offices of Pillsbury Winthrop Shaw Pittman LLP located at 2300 N Street, N.W., Washington, DC, 20037, USA for the following purposes:

1. To elect five persons to the Board of Directors of the Company, each to serve until the next annual meeting of stockholders of the Company or until such person shall resign, be removed or otherwise leave office;
2. To ratify the selection by the Audit Committee of Child, Van Wagoner & Bradshaw PLLC as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2010; and
3. To transact such other business as may properly come before the Meeting or any adjournment thereof.

If you owned our common stock at the close of business on March 24, 2010, you may attend and vote at the meeting.

A Proxy Statement describing the matters to be considered at the Meeting is attached to this Notice. Our 2009 Annual Report accompanies this Notice, but it is not deemed to be part of the Proxy Statement.

Your vote is important. Whether or not you plan to attend the meeting, I hope that you will vote as soon as possible. You may vote your shares by either completing, signing and returning the accompanying proxy card or casting your vote via a toll-free telephone number or over the Internet.

Sincerely,

/s/ Thomas Graham, Jr.

Thomas Graham, Jr.
Chairman and Corporate Secretary

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE STOCKHOLDER MEETING TO BE HELD ON
APRIL 30, 2010**

This Notice and Proxy Statement and our 2009 Annual Report are available online at the website located on your proxy card.



Lightbridge Corporation
1600 Tysons Boulevard, Suite 550
McLean, VA 22102 USA
571.730.1200

PROXY STATEMENT

The Board of Directors of Lightbridge Corporation, a Nevada corporation (the “Company,” “Lightbridge” or “we”) is furnishing this Proxy Statement and the accompanying proxy to you to solicit your proxy for the 2010 Annual Meeting of Stockholders (the “Meeting”). The Meeting will be held on Friday, April 30, 2010, at 11:00 a.m., local time, at the offices of Pillsbury Winthrop Shaw Pittman LLP located at 2300 N Street, N.W., Washington, DC, 20037, USA.

The approximate date on which the Proxy Statement and proxy card are intended to be sent or given to stockholders is March 30, 2010.

The purposes of the Meeting are to seek stockholder approval of two proposals: (i) electing five directors to the Board and (ii) ratifying the appointment of the Company’s accountants for fiscal year 2009.

Who May Vote

Only stockholders of record of our common stock, \$0.001 par value (the “Common Stock”), as of the close of business on March 24, 2010 (the “Record Date”) are entitled to notice and to vote at the Meeting and any adjournment thereof.

A list of stockholders entitled to vote at the Meeting will be available at the Meeting, and will also be available for ten days prior to the Meeting, during office hours, at the executive offices of the Company at 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA.

The presence at the Meeting of holders of a majority of the outstanding shares of Common Stock as of the Record Date, in person or by proxy, is required for a quorum. Should you submit a proxy, even though you abstain as to one or more proposals, or you are present in person at the Meeting, your shares shall be counted for the purpose of determining if a quorum is present.

Broker “non-votes” are included for the purposes of determining whether a quorum of shares is present at the Meeting. A broker “non-vote” occurs when a nominee holder, such as a brokerage firm, bank or trust company, holding shares of record for a beneficial owner does not vote on a particular proposal because the nominee holder does not have discretionary voting power with respect to that item and has not received voting instructions from the beneficial owner.

Each holder of Common Stock on the Record Date is entitled to one vote for each share then held on all matters to be voted at the Meeting. No other class of voting securities is outstanding on the date of mailing of this Proxy Statement.

Voting

Whether you hold shares directly as a registered stockholder of record or beneficially in street name, you may vote without attending the meeting. You may vote by granting a proxy or, for shares held beneficially in street name, by submitting voting instructions to your stockbroker, trustee or nominee. In most cases, you will be able to do this by using the Internet or telephone or by mail. If you attend the meeting and prefer to vote at that time, you may do so.

By Internet – If you have Internet access, you may submit your proxy via the Internet by following the instructions provided on your proxy card or voting instruction card.

By Telephone or Mail – You may submit your proxy by telephone by following the instructions provided on your proxy card or voting instruction card. Voting by telephone is not available to persons outside of the United States.

The shares represented by any proxy duly given will be voted at the Meeting in accordance with the instructions of the stockholder. If no specific instructions are given, the shares will be voted FOR the election of the nominees for directors set forth herein and FOR ratification of Child, Van Wagoner & Bradshaw PLLC as the Company's independent registered public accounting firm. In addition, if other matters come before the Meeting, the persons named in the accompanying proxy card will vote in accordance with their best judgment with respect to such matters.

Under Proposal 1 (Election of Directors), the five candidates for election as directors at the Meeting are uncontested. In uncontested elections, directors are elected by plurality of the votes cast at the meeting. Proposal 2 (Ratification of Independent Auditors) requires the vote of a majority of the shares present in person or by proxy and voting at the Meeting.

Abstentions and broker non-votes will not be counted as votes in favor of a matter being voted on, and will also not be counted as shares voting on such matter. Accordingly, abstentions and "broker non-votes" will have no effect on the voting on matters (such as the election of directors, and the ratification of the selection of the independent registered public accounting firm) that require the affirmative vote of a plurality or a majority of the votes cast.

Revoking Your Proxy

Even if you execute a proxy, you retain the right to revoke it and to change your vote by notifying us at any time before your proxy is voted. Mere attendance at the meeting will not revoke a proxy. Such revocation may be effected by calling the toll-free telephone number identified in the Notice, or by accessing the Internet website specified in the Notice, or in writing by execution of a subsequently dated proxy, or by a written notice of revocation, sent to the attention of the Secretary at the address of our principal office set forth in the Notice of Annual Meeting of Stockholders accompanying this Proxy Statement, or by attending and voting in person at the Meeting. Unless revoked, the shares represented by timely received proxies will be voted in accordance with the directions given therein.

If the Meeting is postponed or adjourned for any reason, at any subsequent reconvening of the Meeting, all proxies will be voted in the same manner as the proxies would have been voted at the previously convened Meeting (except for any proxies that have at that time effectively been revoked or withdrawn), even if the proxies had been effectively voted on the same or any other matter at a previous Meeting.

Solicitation of Proxies

The expenses of solicitation of proxies will be paid by the Company. We may solicit proxies by mail, and the officers and employees of the Company, who will receive no extra compensation therefore, may solicit proxies personally or by telephone. The Company will reimburse brokerage houses and other nominees for their expenses incurred in sending proxies and proxy materials to the beneficial owners of shares held by them.

Delivery of Proxy Materials to Households

The SEC has adopted rules that allow a company to deliver a single proxy statement or annual report to an address shared by two or more of its stockholders. This method of delivery, known as "householding," permits us to realize significant cost savings, reduces the amount of duplicate information stockholders receive, and reduces the environmental impact of printing and mailing documents to you. Under this process, certain stockholders of record who do not participate in electronic delivery of proxy materials will receive only one copy of our proxy materials and any additional proxy materials that are delivered until such time as one or more of these stockholders notifies us that they want to receive separate copies. Any stockholders who object to or wish to begin householding may contact Thomas Graham, our Corporate Secretary, orally by telephoning 571.730.1200 or in writing at Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA. We will send an individual copy of the proxy statement to any stockholder who revokes their consent to householding within 30 days of our receipt of such revocation.

Interest of Officers and Directors in Matters to Be Acted Upon

None of the Company's officers or directors have any interest in any of the matters to be acted upon, except to the extent that a director is named as a nominee for election to the Board of Directors.

Directors and Executive Officers

Set forth below are the names of our current directors, officers and significant employees, their ages, all positions and offices that they hold with us, the period during which they have served as such, and their business experience during at least the last five years.

<u>Name</u>	<u>Age</u>	<u>Position with the Company</u>	<u>Term as Director of Company</u>
Seth Grae	47	President, CEO and Director	April 2006 – Present
Thomas Graham, Jr.	76	Chairman and Corporate Secretary	April 2006 – Present
Victor E. Alessi	70	Director	August 2006 – Present
Jack. D. Ladd	60	Director	October 2006 – Present
Daniel B. Magraw	63	Director	October 2006 – Present
James Guerra	57	Chief Operating Officer and Chief Financial Officer	-
Andrey Mushakov	33	Executive Vice President – International Nuclear Operations	-

Name	Position with the Company and Principal Occupations
Seth Grae	Mr. Grae was named the Chief Executive Officer and President of the Company on March 17, 2006, and effective April 2, 2006, became a director of the Company. Mr. Grae was the President, the Chief Executive Officer and a director of Thorium Power, Inc. prior to the merger with the Company. Mr. Grae has played an active role in all business activities of Thorium Power, Inc. since its inception in 1992. Mr. Grae led the efforts that resulted in Thorium Power, Inc.'s project at the Kurchatov Institute becoming one of the first grant recipients from the United States Department of Energy ("DOE") for nuclear non-proliferation-related work in Russia. He is also a member of the Civil Nuclear Trade Advisory Committee (CINTAC) at the US Department of Commerce and is a member of the board of directors of the Bulletin of the Atomic Scientists and has served as co-chair of the American Bar Association's Committee on Arms Control and Disarmament. As a former member of the board of directors of the Lawyers Alliance for World Security, Mr. Grae helped advise on the drafting of nuclear export control regulations in China and Belarus, and he participated in consultations with the government of India on nuclear issues. On a pro bono basis, he represented refuseniks, who were nuclear scientists, in securing exit visas from the Soviet Union. Mr. Grae obtained his B.A. from Brandeis University cum laude, J.D. from American University, LL.M. in International Law with honors from Georgetown University and M.B.A. from Georgetown University. He has been admitted to the bars of New York, Connecticut, and Florida (all now inactive).
Thomas Graham, Jr.	Ambassador Graham became a director of the Company on April 2, 2006, and chairman of the board of directors on April 4, 2006. Ambassador Graham served as a member of the board of directors of Thorium Power, Inc., from 1997 until the merger with the Company. Ambassador Graham is one of the world's leading experts in nuclear non-proliferation. He is Chairman of the Board of the Cypress Fund for Peace and Security. Ambassador Graham has served as a senior U.S. diplomat involved in the negotiation of every major international arms control and non-proliferation agreement for the past 35 years, including the Strategic Arms Limitations Talks (SALT), Strategic Arms Reduction Talks (START Treaties), Anti-Ballistic Missile (ABM) Treaty, Intermediate Nuclear Forces (INF) Treaty, Nuclear Non-Proliferation Treaty (NPT), Conventional Armed Forces in Europe (CFE) Treaty and Comprehensive Test Ban Treaty (CTBT). In 1993, Ambassador Graham served as the Acting Director of the U.S. Arms Control and Disarmament Agency (ACDA), and for seven months in 1994 served as the Acting Deputy Director. From 1994 through 1997, he served as the Special Representative of the President of the United States for Arms Control, Non-Proliferation and Disarmament, and in this capacity successfully led U.S. government efforts to achieve the permanent extension of the NPT. He also served for 15 years as the general counsel of ACDA. Ambassador Graham worked on the negotiation of the Chemical Weapon Convention and the Biological Weapons Convention. He drafted the implementing legislation for the Biological Weapons Convention and managed the Senate approval of the ratification of the Geneva Protocol banning the use in war of chemical and biological weapons. In 2010, Mr. Graham was appointed as a member of the International Advisory Board for the nuclear program of the United Arab Emirates. He is also Chairman of the Board of Mexico Energy Corporation, an oil and gas exploration company (NYSE Amex: MXC). Ambassador Graham received an A.B. in 1955 from Princeton and a J.D. in 1961 from Harvard University. He is a member of the Kentucky, the District of Columbia and the New York Bars and is a member of the Council on Foreign Relations. He chaired the Committee on Arms Control and Disarmament of the American Bar Association from 1986-1994. Ambassador Graham received the Trainor Award for Distinction in Diplomacy from Georgetown University in 1995 and the World Order Under Law award from the International Law Section of the American Bar Association in 2007.

Victor E. Alessi

Dr. Alessi became a director of the Company on August 23, 2006. Dr. Victor E. Alessi, who holds a Ph.D. in nuclear physics, is President Emeritus of the United States Industry Coalition (“USIC”), an organization dedicated to facilitating the commercialization of technologies of the New Independent States (“NIS”) of the former Soviet Union through cooperation with its members. He has held such position since August 1, 2006; prior to becoming President Emeritus, Dr. Alessi held the positions of CEO and President of USIC since 1999. Previously, he was President of DynMeridian, a subsidiary of DynCorp, specializing in arms control, nonproliferation, and international security affairs. Before joining DynMeridian in early 1996, Dr. Alessi was the Executive Assistant to the Director, U.S. Arms Control and Disarmament Agency (“ACDA”). At ACDA he resolved inter-bureau disputes, and advised the Director on all arms control and nonproliferation issues. Dr. Alessi served as Director of the Office of Arms Control and Nonproliferation in the Department of Energy (“DOE”) prior to his work at ACDA, overseeing all DOE arms control and nonproliferation activities. As a senior DOE representative, Dr. Alessi participated in U.S. efforts that led to successful conclusion of the Intermediate Nuclear Forces (INF), Conventional Forces in Europe, Threshold Test Ban, Peaceful Nuclear Explosions, Open Skies, Strategic Arms Reductions Talks Treaties and the Chemical Weapons Convention. In this role, he was instrumental in implementing the U.S. unilateral nuclear initiative in 1991 and was a member of the U.S. delegation discussing nuclear disarmament with Russia and other states of the former Soviet Union. He was in charge of DOE’s support to the U.N. Special Commission on Iraq, to the Nunn-Lugar Initiative, and represented DOE in discussions on the Comprehensive Test Ban (“CTB”) with the other nuclear weapons states before the CTB negotiations began in Geneva in 1994. Dr. Alessi has been the U.S. board member to the International Science and Technology Center in Moscow since its founding. He is also the U.S. board member to the Science and Technology Center in Ukraine. Dr. Alessi is a 1963 graduate of Fordham University, where he also earned a licentiate in Philosophy (Ph.L.) in 1964. He studied nuclear physics at Georgetown University, receiving his M.S. in 1968 and Ph.D. in 1969.

Jack D. Ladd

Mr. Ladd became a director of the Company on October 23, 2006. Mr. Ladd is the Dean of the School of Business of the University of Texas of the Permian Basin (UTPB), having been appointed to that position in July, 2007. Mr. Ladd was previously the Director of the John Ben Shepperd Leadership Institute of UTPB, having served as the head of that institution beginning in September, 2004. Earlier in his career Mr. Ladd was a practicing attorney with the law firm of Stubbeman, McRae, Sealy, Laughlin & Browder, Inc., in Midland, Texas. Mr. Ladd was appointed to the Texas State Securities Board in 2002 and two years later was designated its Chairman. Mr. Ladd has almost three decades of experience in public affairs, law, governance, and public service. As a practicing attorney, he has served on numerous civic, educational, religious and governmental boards and committees. He holds the Doctor of Jurisprudence degree from The University of Texas in Austin and a B.A. from the University of Texas in Austin.

Daniel B. Magraw Mr. Magraw became a director of the Company on October 23, 2006. Mr. Magraw is a leading expert on international environmental law and policy. Mr. Magraw is President and CEO of the Center for International Environmental Law (CIEL). He has held this position since 2001. From 1992-2001, he was Director of the International Environmental Law Office of the US Environmental Protection Agency. He is a member of the U.S. Department of State Study Group on International Business Transactions and was Chair of the 15,000-member Section of International Law and Practice of the American Bar Association. He practiced international law, constitutional law, and bankruptcy law at Covington & Burling in Washington, DC from 1978-1983. Mr. Magraw is a widely-published author in the field of international environmental law. He is a graduate of Harvard University and the University of California, Berkeley Law School. Since 1996, Mr. Magraw has been a member of the board of directors of Thorium Power, Inc., which is now a wholly-owned subsidiary of the Company.

James Guerra Mr. Guerra became the Chief Financial Officer and Treasurer of the Company on October 29, 2007, and the Chief Operating Officer on November 14, 2008. A seasoned financial executive, Mr. Guerra's experience encompasses domestic and international markets as well as a diverse range of industries including nuclear energy. Most recently, he served as Vice President of Finance and Chief Financial Officer of Exelon Business Services Company from 2002 to 2007. Exelon Business Services Company is the corporate services and operating company of Exelon, the largest producer of nuclear energy in the United States. From 2000-2002, Mr. Guerra served as Vice President of Business Operations and Controller of Exelon Nuclear. Prior to joining Exelon, Mr. Guerra was Vice President of Finance and Treasurer and Controller of Grupo Dina, the Mexico City-based manufacturer of trucks and the largest producer of motor coaches and bus spare parts in North America. Earlier in his career, Mr. Guerra served in senior financial management positions with AT&T, Citigroup, and Beatrice Companies. Mr. Guerra holds a B.A. in Economics from the University of Notre Dame, an M.M. in Accounting/Finance from the Kellogg School of Management of Northwestern University and is a licensed CPA in the State of Illinois.

Andrey Mushakov Mr. Mushakov became the Executive Vice President – International Nuclear Operations of the Company on July 27, 2006. Mr. Mushakov joined Thorium Power, Inc. in 2000 and has served in various positions of increasing responsibility at the Company. He is the primary liaison between the Company and the Russian nuclear organizations involved in nuclear fuel technology development. In 2004, Mr. Mushakov led successful negotiations with officials from the National Nuclear Security Administration and Oak Ridge National Laboratory (ORNL) that resulted in signing of a government contract between ORNL and Kurchatov Institute for work relating to the Company's nuclear fuel development effort in Russia. His prior experience includes finance-related work in the banking and construction sectors. Mr. Mushakov has the following degrees: PhD in Economics from St. Petersburg State University of Economics and Finance (Russia), MS in Management with excellence (MBA equivalent) from Hult International Business School (formerly the Arthur D. Little School of Management), where he was enrolled as a recipient of the Russian President's Scholarship, and BS in Banking and Finance with honors from the Finance Academy of Russia.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires directors, executive officers and stockholders who own more than ten percent of the outstanding Common Stock of the Company to file with the SEC and NASDAQ reports of ownership and changes in ownership of voting securities of the Company and to furnish copies of such reports to us.

Based solely on a review of the copies of such forms received by the Company, we believe that with respect to the year ended December 31, 2009, the Company's directors, officers and more than ten-percent stockholders timely filed all such required forms except as follows (all shares restated to reflect the 1-to-30 reverse stock split that occurred in September 2009): Thomas Graham did not timely file a Form 4 relating to the grant of 5,402 shares of restricted stock on July 22, 2009. Jack Ladd did not timely file a Form 4 relating to the issuance of 7,485 shares issued in 2009, and did not timely file a Form 4 relating to the grant of 5,402 shares of restricted stock on July 22, 2009. Daniel Magraw did not timely file a Form 4 relating to the issuance of 7,400 shares issued in 2009, and did not timely file a Form 4 relating to the grant of 5,402 shares of restricted stock on July 22, 2009. Victor Alessi did not timely file a Form 4 relating to the grant of 5,402 shares of restricted stock on July 22, 2009

CORPORATE GOVERNANCE

Our current corporate governance practices and policies are designed to promote stockholder value and we are committed to the highest standards of corporate ethics and diligent compliance with financial accounting and reporting rules. Our Board provides independent leadership in the exercise of its responsibilities. Our management oversees a system of internal controls and compliance with corporate policies and applicable laws and regulations, and our employees operate in a climate of responsibility, candor and integrity.

Corporate Governance Guidelines

We and our Board are committed to high standards of corporate governance as an important component in building and maintaining stockholder value. To this end, we regularly review our corporate governance policies and practices to ensure that they are consistent with the high standards of other companies. We also closely monitor guidance issued or proposed by the SEC and the provisions of the Sarbanes-Oxley Act, as well as the emerging best practices of other companies. The current corporate governance guidelines are available on the Company's website www.ltbridge.com. Printed copies of our corporate governance guidelines may be obtained, without charge, by contacting the Corporate Secretary, Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA.

The Board and Committees of the Board

The Company is governed by the Board that currently consists of five members: Seth Grae, Thomas Graham, Victor Alessi, Jack Ladd and Daniel Magraw. The Board has established four Committees: the Audit Committee, the Compensation Committee, the Nominating and Governance Committee and the Executive Committee. Each of the Audit Committee, Compensation Committee and Nominating and Governance Committee are comprised entirely of independent directors. From time to time, the Board may establish other committees. The Board has adopted a written charter for each of the Committees which are available on the Company's website www.ltbridge.com. Printed copies of these charters may be obtained, without charge, by contacting the Corporate Secretary, Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA.

Governance Structure

The Company has chosen to separate the roles of the Chairman of the Board of Directors and the Chief Executive Officer, though our current Chairman, Thomas Graham, Jr., is a member of the Company's executive management. We have chosen to implement such a governance structure to allow our Chief Executive Officer the ability to focus the majority of his time and efforts on the day to day operations of the Company. We believe that this governance structure has served the Company's shareholders well over the years.

We encourage our shareholders to learn more about our Company's governance practices at our website, www.ltbridge.com.

The Board's Role in Risk Oversight

The Board oversees that the assets of the Company are properly safeguarded, that the appropriate financial and other controls are maintained, and that the Company's business is conducted wisely and in compliance with applicable laws and regulations and proper governance. Included in these responsibilities is the Board of Directors' oversight of the various risks facing the Company. In this regard, the Board seeks to understand and oversee critical business risks. The Board does not view risk in isolation. Risks are considered in virtually every business decision and as part of the Company's business strategy. The Board recognizes that it is neither possible nor prudent to eliminate all risk. Indeed, purposeful and appropriate risk-taking is essential for the Company to be competitive on a global basis and to achieve its objectives.

While the Board oversees risk management, Company management is charged with managing risk. The Company has robust internal processes and a strong internal control environment to identify and manage risks and to communicate with the Board. The Board and the Audit Committee monitor and evaluate the effectiveness of the internal controls and the risk management program at least annually. Management communicates routinely with the Board, Board Committees and individual Directors on the significant risks identified and how they are being managed. Directors are free to, and indeed often do, communicate directly with senior management.

The Board implements its risk oversight function both as a whole and through Committees. Much of the work is delegated to various Committees, which meet regularly and report back to the full Board. All Committees play significant roles in carrying out the risk oversight function. In particular:

- The Audit Committee oversees risks related to the Company's financial statements, the financial reporting process, accounting and legal matters. The Audit Committee oversees the internal audit function and the Company's ethics programs, including the Codes of Business Conduct. The Audit Committee members meet separately with representatives of the independent auditing firm.
- The Compensation Committee evaluates the risks and rewards associated with the Company's compensation philosophy and programs. The Compensation Committee reviews and approves compensation programs with features that mitigate risk without diminishing the incentive nature of the compensation. Management discusses with the Compensation Committee the procedures that have been put in place to identify and mitigate potential risks in compensation.

Independent Directors

In considering and making decisions as to the independence of each of the directors of the Company, the Board considered transactions and relationships between the Company (and its subsidiaries) and each director (and each member of such director's immediate family and any entity with which the director or family member has an affiliation such that the director or family member may have a material indirect interest in a transaction or relationship with such entity). The Board has determined that the following members of the Board are independent as defined in applicable SEC and NASDAQ rules and regulations, and that each constitutes an "Independent Director" as defined in NASD Marketplace Rule 4200, and that such members constitute a majority of the entire Board: Mr. Alessi, Mr. Ladd and Mr. Magraw.

Audit Committee

Our Audit Committee consists of Messrs. Alessi, Ladd and Magraw, each of whom is “independent” as that term is defined under the Nasdaq listing standards. The Audit Committee oversees our accounting and financial reporting processes and the audits of the financial statements of our company. Mr. Ladd serves as our Audit Committee financial expert as that term is defined by the applicable SEC rules. The Audit Committee is responsible for, among other things:

- selecting our independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by our independent auditors;
- reviewing with our independent auditors any audit problems or difficulties and management’s response;
- reviewing and approving all proposed related-party transactions, as defined in Item 404 of Regulation S-K under the Securities Act of 1933, as amended;
- discussing the annual audited financial statements with management and our independent auditors;
- reviewing major issues as to the adequacy of our internal controls and any special audit steps adopted in light of significant internal control deficiencies;
- annually reviewing and reassessing the adequacy of our Audit Committee charter;
- meeting separately and periodically with management and our internal and independent auditors; and
- reporting regularly to the full board of directors; and
- such other matters that are specifically delegated to our Audit Committee by our board of directors from time to time.

All members of the Audit Committee met by telephone or in person 4 times during the fiscal year ended December 31, 2009.

The Report of the Audit Committee regarding the audited financials statements of the Company for the fiscal year ended December 31, 2009 is located on [Appendix A](#) to this Proxy Statement.

Compensation Committee

Our Compensation Committee consists of Messrs. Alessi, Ladd and Magraw, each of whom is “independent” as that term is defined under the Nasdaq listing standards. Our Compensation Committee assists the board in reviewing and approving the compensation structure of our directors and executive officers, including all forms of compensation to be provided to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The Compensation Committee is responsible for, among other things:

- approving and overseeing the compensation package for our executive officers;
- reviewing and making recommendations to the board with respect to the compensation of our directors;

- reviewing and approving corporate goals and objectives relevant to the compensation of our chief executive officer, evaluating the performance of our chief executive officer in light of those goals and objectives, and setting the compensation level of our chief executive officer based on this evaluation; and
- reviewing periodically and making recommendations to the board regarding any long-term incentive compensation or equity plans, programs or similar arrangements, annual bonuses, employee pension and welfare benefit plans.

The Compensation Committee has sole authority to retain and terminate outside counsel, compensation consultants retained to assist the Compensation Committee in determining the compensation of the Chief Executive Officer or senior executive officers, or other experts or consultants, as it deems appropriate, including sole authority to approve the firms' fees and other retention terms. The Compensation Committee may also form and delegate authority to subcommittees and may delegate authority to one or more designated members of the Compensation Committee. The Compensation Committee may from time to time seek recommendations from the executive officers of the Company regarding matters under the purview of the Compensation Committee, though the authority to act on such recommendations rests solely with the Compensation Committee.

Our Compensation Committee met 2 times during the fiscal year ended December 31, 2009.

Governance and Nominating Committee

Our Governance and Nominating Committee consists of Messrs. Alessi, Ladd and Magraw, each of whom is “independent” as that term is defined under the Nasdaq listing standards. The Governance and Nominating Committee assists the board of directors in identifying individuals qualified to become our directors and in determining the composition of the board and its committees. The Governance and Nominating Committee is responsible for, among other things:

- identifying and recommending to the board nominees for election or re-election to the board, or for appointment to fill any vacancy;
- reviewing annually with the board the current composition of the board in light of the characteristics of independence, age, skills, experience and availability of service to us;
- identifying and recommending to the board the directors to serve as members of the board’s committees; and
- monitoring compliance with our code of business conduct and ethics.

Our Governance and Nominating Committee met 1 time during the fiscal year ended December 31, 2009.

Executive Committee

Our Executive Committee consists of Messrs. Alessi, Grae and Graham. The Executive Committee of the Company exercises the power of the board of directors between regular meetings of the board of directors and when timing is critical. The Executive Committee also assists the Board in fulfilling its oversight responsibility with respect to management-level staff, outside services providers and third party vendors.

Code of Ethics

The Board has adopted a Code of Conduct and Ethics that applies to the Company's directors, officers and employees. A copy of this policy is available via our website at www.ltbridge.com. Printed copies of our Code of Ethics may be obtained, without charge, by contacting the Corporate Secretary, Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA. During the fiscal year ended December 31, 2009, there were no waivers of our Code of Ethics.

Stockholder Communication with the Board of Directors.

Stockholders may communicate with the Board, including non-management directors, by sending a letter to our board of directors, c/o Corporate Secretary, Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA for submission to the board or committee or to any specific director to whom the correspondence is directed. Stockholders communicating through this means should include with the correspondence evidence, such as documentation from a brokerage firm, that the sender is a current record or beneficial stockholder of the Company. All communications received as set forth above will be opened by the Corporate Secretary or his designee for the sole purpose of determining whether the contents contain a message to one or more of our directors. Any contents that are not advertising materials, promotions of a product or service, patently offensive materials or matters deemed, using reasonable judgment, inappropriate for the Board will be forwarded promptly to the chairman of the Board, the appropriate committee or the specific director, as applicable.

EXECUTIVE COMPENSATION

The following table sets forth information concerning all cash and non-cash compensation awarded to, earned by or paid to the named persons for services rendered in all capacities during the noted periods. No other executive officers received total annual salary and bonus compensation in excess of \$100,000.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$) ⁽¹⁾	Option Awards (\$) ⁽¹⁾	All Other Compensation (\$) ⁽²⁾	Total (\$)
Seth Grae	2009	380,998	194,500	191,875	576,755	137,143	1,481,271
CEO, President and Director	2008	341,000	170,500	-	-	64,137	575,637
Thomas Graham, Jr.	2009	227,794	-	35,000	-	2,139	264,933
Chairman and Corporate Secretary ⁽³⁾	2008	222,600	-	-	-	2,679	225,279
James Guerra	2009	262,000	26,200	160,800	168,334	33,619	650,953
CFO and COO ⁽⁴⁾	2008	222,600	111,300	-	-	46,046	379,946

- (1) The valuation of stock-based compensation is based in accordance with FASB Accounting Standards Codification Topic 718 "Compensation- Stock Compensation", which requires the measurement of the cost of employee services received in exchange for an award of an equity instrument on the grant-date fair value of the award. Amounts shown for 2008, which were previously reported under prior rules concerning valuation, have been restated to reflect that no equity awards were granted to any of our named executive officers in 2008.
- (2) The heading "All Other Compensation" includes life insurance, disability insurance, medical and dental insurance, certain travel arrangements, and retroactive salary increases to the prior year's base salary. With respect to Mr. Grae, "All Other Compensation" includes \$99,739 for expenses in connection with his temporary relocation in the first half of 2009 to Abu Dhabi, UAE.
- (3) Though his official title is Chairman of the Board of Directors, Mr. Graham is considered to be an executive officer of the Company.
- (4) Mr. Guerra joined the Company as Chief Financial Officer on October 29, 2007. On November, 14, 2008 Mr. Guerra was also appointed as the Company's Chief Operating Officer.

Narrative disclosure to summary compensation table

On September 29, 2009, the 1-for-30 reverse split of the Company's common shares became effective. Total common stock outstanding at December 31, 2009 was 10,168,412 and the following disclosures have been made for prior year stock and stock option grants have been restated below to reflect this 1 for 30 reverse stock split.

On February 14, 2006, the Company entered into an employment agreement with Seth Grae, wherein the Company agreed to pay to Mr. Grae an annual salary of \$275,000 for performing the duties described in the employment agreement. Mr. Grae is also eligible to receive raises and discretionary bonuses, as well as stock based compensation over the term of the agreement. In addition, the Company agreed to issue to Mr. Grae 166,667 shares of common stock; all 166,667 shares of stock vested immediately on issuance. The Company redeemed 78,966 shares of these shares, for tax withholding to federal and state taxing authorities. Mr. Grae's employment officially commenced on March 17, 2006, the date that the Company obtained D&O liability insurance coverage, and terminates on the fifth anniversary of the date of the agreement. As of January 1, 2008, Mr. Grae's salary was increased to an annual salary of \$341,000 and he received a bonus in the amount of \$137,060 for his services in 2007 which was paid in 2008. As of March 1, 2009, Mr. Grae's salary was increased to an annual salary of \$389,000 and he received a bonus in the amount of \$170,500 for his services in 2008 which was paid in 2009. Prior to his employment agreement, Mr. Grae owned 66,667 shares of the Company's stock which had been awarded by the Company to him for pre-employment consulting services. Prior to his employment agreement Mr. Grae also owned 313,698 shares of Thorium Power, Inc., which pursuant to the merger agreement was converted to 8,039,390 shares (267,980 equivalent shares restated for 1-for-30 reverse stock split) of the Company's stock at a rate of 25,628 shares per share of Thorium Power, Inc.

Also on February 14, 2006, the Company entered into an option agreement with Seth Grae, wherein the Company granted to Mr. Grae 240,000 non-qualified stock options, with a term of ten years at an exercise price of \$23.85 per share. Mr. Grae's option vested with respect to 6/48 of the total number of options on the six month anniversary of the option agreement, and the remaining options vest in equal monthly installments of 1/48 the total number of options until all of the options have vested. Mr. Grae's option will immediately and automatically vest in full upon a Change of Control, the termination of Mr. Grae's employment by the Company without Cause, or the termination of Mr. Grae's employment by Mr. Grae for Good Reason. "Change of Control," "Cause," and "Good Reason" are each defined in that certain employment agreement between Mr. Grae and the Company, dated February 14, 2006.

On October 6, 2006, the Company and Mr. Grae entered into an agreement whereby the parties cancelled an option, held by Mr. Grae, to purchase 150,000 shares of Thorium Power, Inc.'s common stock at an exercise price of \$4.00. In consideration for terminating the options above, the Company then granted to Mr. Grae a non-qualified option for the purchase of 128,139 shares of the common stock of the Company, at an exercise price of \$4.68 per share. The pricing and amount of shares granted to Mr. Grae was determined using the Black-Scholes option pricing model, so that the value of the cancelled and newly granted shares was the same.

In December 2006, the Board of Directors granted to Mr. Grae 100,000 shares of the Company's common stock as a year end 2006 bonus. The Company redeemed 40,000 of these shares, for tax withholding to federal and state taxing authorities.

On December 5, 2007, the Compensation Committee of the Board of Directors granted to Mr. Grae 12,104 shares of the Company's common stock as part of its annual equity compensation to employees. The Company redeemed 4,841 of these shares, for tax withholding to federal and state taxing authorities. Additionally on December 5, 2007, the Compensation Committee granted to Mr. Grae two separate incentive stock options to purchase the Company's common stock. The first option is a 10 year option to purchase 36,311 shares of the Company's common stock, vesting in equal monthly installments over a three year period with an exercise price of \$10.50. The second option is an 8 year option to purchase 166,667 shares of the Company's common stock, vesting in equal monthly installments over a two year period with an exercise price of \$13.50.

On July 14, 2009, the Compensation Committee of the Board of Directors granted to Mr. Grae 33,663 shares of the Company's common stock as part of its annual equity compensation to employees, which vest 1/3 on each anniversary of the grant date, over three years. Additionally on July 14, 2009, the Compensation Committee granted to Mr. Grae a non-qualified stock option for the purchase of 112,868 shares of the common stock of the Company, at an exercise price of \$5.70 per share.

In addition to common shares of the Company's stock held prior to Mr. Grae's employment with the Company, and stock compensation granted to Mr. Grae over the term of his employment, Mr. Grae indirectly owns 3,200 shares of the Company's stock that he purchased in the name of his wife.

On July 27, 2006, the Company granted to Mr. Graham, pursuant to the Company's Second Amended and Restated 2006 Stock Plan, a non-qualified ten-year option for the purchase of 50,000 shares of the common stock of the Company, at an exercise price of \$14.70 per share. Mr. Graham's option vested with respect to 1/36 of the total number of shares on the date of grant, and the remaining shares vest in equal monthly installments of 1/36 the total number of shares until all shares underlying the Option have vested. Mr. Graham's option will immediately and automatically vest in full upon a Change of Control, the termination of Mr. Graham's employment by the Company without Cause, or the termination of Mr. Graham's employment by Mr. Graham for Good Reason. "Change of Control," "Cause," and "Good Reason" are each defined in that certain employment agreement between Mr. Graham and the Company, dated July 27, 2006.

On July 5, 2007, the Company granted to Mr. Graham, pursuant to the Company's Second Amended and Restated 2006 Stock Plan, a non-qualified ten-year option for the purchase of 50,000 shares of the common stock of the Company, at an exercise price of \$8.10 per share. Mr. Graham's option vested with respect to 1/36 of the total number of shares on the date of grant, and the remaining shares vest in equal monthly installments of 1/36 the total number of shares until all shares underlying the Option have vested. Mr. Graham's option will immediately and automatically vest in full upon a Change of Control, the termination of Mr. Graham's employment by the Company without Cause, or the termination of Mr. Graham's employment by Mr. Graham for Good Reason. "Change of Control," "Cause," and "Good Reason" are each defined in that certain employment agreement between Mr. Graham and the Company, dated August 1, 2007.

On December 5, 2007, the Compensation Committee of the Board of Directors granted to Mr. Graham 3,205 shares of the Company's common stock as part of its annual equity compensation to employees. Additionally on December 5, 2007, the Compensation Committee granted to Mr. Graham a 10 year incentive stock option to purchase 9,614 shares of the Company's common stock, vesting in equal monthly instalments over a three year period with an exercise price of \$10.50.

On July 22, 2009, the Compensation Committee of the Board of Directors granted to Mr. Graham 5,402 shares of the Company's common stock as part of its annual equity compensation to employees, which vests 1/3 on each anniversary of the grant date, over three years.

On October 23, 2007, the Company entered into an employment agreement with Mr. Guerra pursuant to which the Company agreed to pay Mr. Guerra an annual salary of \$222,600, as consideration for performance of his duties as Chief Financial Officer, Treasurer and Executive Vice President. In addition, the Company issued to Mr. Guerra, pursuant to the Company's 2006 Stock Plan (i) 33,333 shares of common stock of the Company, which vest in equal monthly installments over a three year term with accelerated vesting upon a change of control, termination of Mr. Guerra by the Company without cause or the cessation of Mr. Guerra's employment with the Company for good reason and (ii) a ten-year non-qualified option for the purchase of 33,333 shares of the common stock of the Company, at an exercise price of \$7.05 per share. The terms of the October 23, 2007 agreement continue to set forth the terms and compensation with regard to Mr. Guerra's employment following the appointment of Mr. Guerra as the Company's Chief Operating Officer on November 14, 2008. In 2009, Mr. Guerra's salary was increased to \$262,000 and that increase was made retroactive to November 14, 2008.

On December 5, 2007, the Compensation Committee of the Board of Directors granted to Mr. Guerra 372 shares of the Company's common stock as part of its annual equity compensation to employees. Additionally on December 5, 2007, the Compensation Committee granted to Mr. Guerra a 10 year incentive stock option to purchase 1,862 shares of the Company's common stock, vesting in equal monthly installments over a three year period with an exercise price of \$10.50.

On July 14, 2009, the Compensation Committee of the Board of Directors granted to Mr. Guerra 9,825 shares of the Company's common stock as part of its annual equity compensation to employees, which vest 1/3 on each anniversary of the grant date, over three years. Additionally on July 14, 2009, the Compensation Committee granted to Mr. Guerra a non-qualified stock option for the purchase of 32,942 shares of the common stock of the Company, at an exercise price of \$5.70 per share.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth all outstanding equity awards to our named executive officers as of December 31, 2009.

Name	Option Awards					Stock Awards				
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable ⁽¹⁾	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)	
Seth Grae, President, CEO and Director	230,000	10,000	—	\$ 23.85	02/14/16	—	—	—	—	
Thomas Graham, Chairman and Corporate Secretary	128,139	-	—	\$ 4.68	08/17/10	—	—	—	—	
James Guerra, CFO, COO	25,216	11,095	—	\$ 10.50	12/05/17	—	—	—	—	
	115,741	50,926	—	\$ 13.50	12/05/15	—	—	—	—	
	-	112,868	—	\$ 5.70	07/14/19	33,663	\$ 201,641-	-	-	
Thomas Graham, Chairman and Corporate Secretary	50,000	-	—	\$ 14.70	07/27/16	—	—	—	—	
	6,677	2,937	—	\$ 10.50	12/05/17	—	—	—	—	
	41,667	8,333	—	\$ 8.10	07/05/17	5,402	\$ 32,358	—	—	
James Guerra, CFO, COO	18,056	15,278	—	\$ 7.05	10/29/17	8,334	\$ 49,920	—	—	
	1,294	569	—	\$ 10.50	12/05/17	—	—	—	—	
	—	32,942	—	\$ 5.70	07/14/19	9,825	\$ 59,852	—	—	

Narrative to outstanding equity awards table

This information is located in the narrative to the summary compensation table above.

Director Compensation

The following table sets forth certain information concerning the compensation paid to our directors for services rendered to us during the fiscal year ending December 31, 2009. Neither Mr. Grae nor Mr. Graham were compensated for their service as directors in 2009.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)	Total (\$)
Victor Alessi	38,000	35,000	-	73,000
Jack Ladd	20,000	55,000	-	75,000
Daniel Magraw	19,000	54,000	-	73,000

(1) Each of Messrs. Alessi, Ladd and Magraw individually had an aggregate of 19,461 option awards outstanding as of December 31, 2009.

Narrative to director compensation table

We currently have three independent directors: Victor Alessi, Jack Ladd and Daniel Magraw. Mr. Alessi became a director of the Company on August 21, 2006. Pursuant to the Independent Director Contract between Mr. Alessi and the Company, Mr. Alessi receives \$38,000 in cash per year for acting as a director of the Company. Messrs. Ladd and Magraw became directors of the Company on October 23, 2006. Pursuant to their respective Independent Director Contracts with the Company, Mr. Ladd receives \$20,000 in cash per year and \$20,000 worth of the Company's common stock per year for serving on the board of directors of the Company. Mr. Magraw receives \$19,000 in cash per year and \$19,000 worth of the Company's common stock per year for serving on the board of directors of the Company.

Additionally, each of Messrs. Alessi, Ladd and Magraw were granted non-qualified options to purchase up to 16,667 shares of the common stock of the Company which shall vest with respect to 1/36 of the total number of shares on the one month anniversary of the date of grant; the remaining shares will subsequently vest 1/36 on the first day of each month thereafter until all options have vested. Each option shall immediately and automatically vest in full upon the termination of the respective director's employment by the Company without cause.

Except for Messrs. Alessi, Ladd and Magraw, all of our current directors are also our officers and are compensated for the services that they provide to us in their capacity as officers. Other than Messrs. Alessi, Ladd and Magraw, our current directors do not receive any additional compensation for the services they provide to us as directors. Directors are reimbursed for out of pocket expenses incurred as a result of their participation on our board.

On December 5, 2007, the Compensation Committee of the Board of Directors granted to each of Messrs. Alessi, Ladd and Magraw 931 shares of the Company's common stock as part of its annual equity compensation to employees. Additionally on December 5, 2007, the Compensation Committee granted to each of Messrs. Alessi, Ladd and Magraw a 10 year incentive stock option to purchase 2,794 shares of the Company's common stock, vesting in equal monthly installments over a three year period with an exercise price of \$10.50.

On July 22, 2009, the Compensation Committee of the Board of Directors granted to each of Messrs. Alessi, Ladd and Magraw 5,402 shares of restricted stock, which vest 1/3 on each anniversary of the grant date over three years.

Changes in Control

There are currently no arrangements which may result in a change in control of the Company.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information known to us with respect to the beneficial ownership of our Common Stock as of March 25, 2010 for: (i) each person known by us to beneficially own more than 5% of our voting securities, (ii) each executive officer, (iii) each of our directors and nominees, and (iv) all of our executive officers and directors as a group.

Unless otherwise specified, the address of each of the persons set forth below is in care of Lightbridge Corporation, 1600 Tysons Boulevard, Suite 550, McLean, Virginia, 22102 USA.

Name and Address of Beneficial Owner ⁽¹⁾	Amount and Nature of Beneficial Ownership ⁽¹⁾⁽²⁾	Percent of Common Stock ⁽³⁾
Seth Grae ⁽⁴⁾	1,091,479	9.81%
Thomas Graham, Jr.	175,479	1.68%
Andrey Mushakov	180,104	1.73%
James Guerra	89,196	*
Dan Magraw	50,762	*
Victor Alessi	25,407	*
Jack Ladd	34,480	*
Directors and Officers as a Group (seven people)	1,646,907	14.32%

* Denotes less than 1% of the outstanding shares of Common Stock.

- (1) The number of shares beneficially owned is determined under SEC rules, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under those rules, beneficial ownership includes any shares as to which the individual has sole or shared voting power or investment power, and also any shares which the individual has the right to acquire within 60 days of the Record Date, through the exercise or conversion of any stock option, convertible security, warrant or other right (a "Presently Exercisable" security). Including those shares in the table does not, however, constitute an admission that the named shareholder is a direct or indirect beneficial owner of those shares.
- (2) Unless otherwise indicated, each person or entity named in the table has sole voting power and investment power (or shares that power with that person's spouse) with respect to all shares of common stock listed as owned by that person or entity.
- (3) A total of 11,504,301 shares of the Company's common stock are considered to be outstanding pursuant to Rule 13d-3(d)(1) under the Securities Exchange Act of 1934. For each beneficial owner above, any options exercisable within 60 days have been included in the denominator.
- (4) Included in the shares for Mr. Grae are 414,787 shares of the Company's common stock underlying options which are currently out-of-the-money.

**TRANSACTIONS WITH RELATED PERSONS,
PROMOTERS AND CERTAIN CONTROL PERSONS**

None of our directors, director nominees or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

PROPOSAL 1

ELECTION OF DIRECTORS

The Board of Directors is responsible for establishing broad corporate policies and monitoring the overall performance of the Company. It selects the Company's executive officers, delegates authority for the conduct of the Company's day-to-day operations to those officers, and monitors their performance. Members of the Board keep themselves informed of the Company's business by participating in Board and Committee meetings, by reviewing analyses and reports, and through discussions with the Chairman and other officers.

See "Governance and Nominating Committee" above for a discussion of the process for selecting directors.

There are currently five directors serving on the Board. At the Meeting, five directors will be elected. The individuals who have been nominated for election to the Board at the Meeting are listed in the table below. Each of the nominees is a current director of the Company.

If, as a result of circumstances not now known or foreseen, any of the nominees is unavailable to serve as a nominee for director at the time of the Meeting, the holders of the proxies solicited by this Proxy Statement may vote those proxies either (i) for the election of a substitute nominee who will be designated by the proxy holders or by the present Board or (ii) for the balance of the nominees, leaving a vacancy. Alternatively, the size of the Board may be reduced accordingly. The Board has no reason to believe that any of the nominees will be unwilling or unable to serve, if elected as a Director. The five nominees for election as directors are uncontested. In uncontested elections, directors are elected by plurality of the votes cast at the meeting. **Proxies submitted on the accompanying proxy card will be voted for the election of the nominees listed below, unless the proxy card is marked otherwise.**

The Board of Directors recommends a vote FOR the election of the nominees listed below.

NOMINEES

The names, the positions with the Company and the ages as of the Record Date of the individuals who are our nominees for election as directors are:

<u>Name</u>	<u>Age</u>	<u>Position with the Company</u>	<u>Term as Director of Company</u>
Seth Grae	47	President, CEO and Director	April 2006 – Present
Thomas Graham, Jr.	76	Chairman and Corporate Secretary	April 2006 – Present
Victor E. Alessi	70	Director	August 2006 – Present
Jack. D. Ladd	60	Director	October 2006 – Present
Daniel B. Magraw	63	Director	October 2006 – Present

Director Qualifications

Directors are responsible for overseeing the Company's business consistent with their fiduciary duty to shareowners. This significant responsibility requires highly-skilled individuals with various qualities, attributes and professional experience. The Board believes that there are general requirements for service on the Company's Board of Directors that are applicable to all Directors and that there are other skills and experience that should be represented on the Board as a whole but not necessarily by each Director. The Board and the Governance and Nominating Committee of the Board consider the qualifications of Directors and Director candidates individually and in the broader context of the Board's overall composition and the Company's current and future needs.

Qualifications for All Directors

In its assessment of each potential candidate, including those recommended by shareowners, the Governance and Nominating Committee considers the nominee's judgment, integrity, experience, independence, understanding of the Company's business or other related industries and such other factors the Governance and Nominating Committee determines are pertinent in light of the current needs of the Board. The Governance and Nominating Committee also takes into account the ability of a Director to devote the time and effort necessary to fulfill his or her responsibilities to the Company.

The Board and the Governance and Nominating Committee require that each Director be a recognized person of high integrity with a proven record of success in his or her field. Each Director must demonstrate innovative thinking, familiarity with and respect for corporate governance requirements and practices, an appreciation of multiple cultures and a commitment to sustainability and to dealing responsibly with social issues. In addition to the qualifications required of all Directors, the Board assesses intangible qualities including the individual's ability to ask difficult questions and, simultaneously, to work collegially.

The Board does not have a specific diversity policy, but considers diversity of race, ethnicity, gender, age, cultural background and professional experiences in evaluating candidates for Board membership. Diversity is important because a variety of points of view contribute to a more effective decision-making process.

Qualifications, Attributes, Skills and Experience to be Represented on the Board as a Whole

The Board has identified particular qualifications, attributes, skills and experience that are important to be represented on the Board as a whole, in light of the Company's current needs and business priorities. The Company's services are performed in various countries around the world and significant areas of future growth are located outside of the United States. The Company's business is truly global and multicultural. Therefore, the Board believes that international experience or specific knowledge of key geographic growth areas and diversity of professional experiences should be represented on the Board. The Company's business is multifaceted and involves complex financial transactions in various countries. Therefore, the Board believes that the Board should include some Directors with a high level of financial literacy and some Directors who possess relevant business experience as a Chief Executive Officer or President. Our business involves complex technologies in a highly specialized industry. Therefore, the Board believes that extensive knowledge of the Company's business and the nuclear industry should be represented on the Board. The Company's business also requires compliance with a variety of regulatory requirements across a number of countries and relationships with various governmental entities. Therefore, the Board believes that governmental, political or diplomatic expertise should be represented on the Board.

Summary of Qualifications of 2010 Nominees for Director

Set forth below is a narrative disclosure that summarizes some of the specific qualifications, attributes, skills and experiences of our directors.

Seth Grae

Mr. Grae was named the Chief Executive Officer and President of the Company on March 17, 2006, and effective April 2, 2006, became a director of the Company. Seth Grae has led the development and implementation of Lightbridge's business efforts to develop and deploy nuclear fuel technologies that enhance proliferation resistance and reduce waste, and to provide comprehensive advisory services based on non-proliferation, safety, and transparency for emerging commercial nuclear power programs.

He is a member of the Governing Board of the Bulletin of the Atomic Scientists and has served as co-chair of the American Bar Association's Committee on Arms Control and Disarmament. This past year, Mr. Grae was appointed by US Secretary of Commerce Gary Locke to the Civil Nuclear Trade Advisory Council (CINTAC) as a committee member to represent the thorium-based fuel segment of the U.S. civil nuclear industry. He has also served as a member of the board of directors of the Lawyers Alliance for World Security. He reviews the work of the Company's principal financial and accounting officers on significant matters related to the Company's financial position and results of operations, and the presentation of its financial statements.

Thomas Graham, Jr.

Ambassador Graham became a director of the Company on April 2, 2006, and chairman of the board of directors on April 4, 2006. He is one of the world's leading experts in nuclear non-proliferation and has recently been appointed as an advisor to the International Advisory Board for the UAE Nuclear Program. Ambassador Graham has served as a senior U.S. diplomat involved in the negotiation of every major international arms control and non-proliferation agreement during the period from 1970 to 1997. Ambassador Graham is also the Chairman of the Board of the Cypress Fund for Peace and Security, as well as the Chairman of the Board of Mexico Energy Corporation, an oil and gas exploration company (NYSE Amex: MXC). He is a member of the Kentucky, the District of Columbia and the New York Bars and is a member of the Council on Foreign Relations. He chaired the Committee on Arms Control and Disarmament of the American Bar Association from 1986-1994.

Victor E. Alessi

Dr. Alessi became a director of the Company on August 23, 2006. Dr. Alessi holds a Ph.D. in nuclear physics and is President Emeritus of the United States Industry Coalition ("USIC"), an organization dedicated to facilitating the commercialization of technologies of the New Independent States ("NIS") of the former Soviet Union through cooperation with its members. Victor Alessi served President and CEO of USIC from 1999 to 2006, focusing on commercializing technologies developed in nuclear institutes in the former Soviet Union and companies in the United States to prevent the spread of nuclear weapons. Coinciding with his tenure at USIC, Dr. Alessi has also been the U.S. Representative on the Governing Board of the International Science and Technology Center in Moscow since its founding in 1992. Earlier, Dr. Alessi served as Director of the Office of Arms Control and Non-proliferation at the Department of Energy ("DOE"), where he oversaw all arms control and non-proliferation activities during the administration of President George H.W. Bush. As a senior DOE official, he played an instrumental role in implementing the U.S. unilateral nuclear initiative in 1991.

Jack D. Ladd

Mr. Ladd became a director of the Company on October 23, 2006. Mr. Ladd has almost three decades of experience in public affairs, law, governance, and public service. Mr. Ladd is the Director of the John Ben Shepperd Leadership Institute of the University of Texas, Permian Basin. He is also the Chairman of the Texas State Securities Board. As a practicing attorney for 28 years, he has served on numerous civic, educational, religious and governmental boards and committees. As Audit Committee Chairman he reviews the work of the Company's principal financial and accounting officers on significant matters related to the Company's financial position and results of operations, and the presentation of its financial statements.

Daniel B. Magraw

Mr. Magraw became a director of the Company on October 23, 2006, and is a leading expert on international environmental law and policy. Mr. Magraw is President and CEO of the Center for International Environmental Law (CIEL). From 1992-2001, he was Director of the International Environmental Law Office of the US Environmental Protection Agency. He is a member of the U.S. Department of State Study Group on International Business Transactions and was Chair of the 15,000-member Section of International Law and Practice of the American Bar Association. Mr. Magraw is a widely-published author in the field of international environmental law.

General Information

For information as to the shares of the Common Stock held by each nominee, see “Security Ownership of Certain Beneficial Owners and Management,” above.

See “Directors and Executive Officers” above for biographical summaries for each of our director nominees.

All directors will hold office for the terms indicated, or until their earlier death, resignation, removal or disqualification, and until their respective successors are duly elected and qualified. There are no arrangements or understandings between any of the nominees, directors or executive officers and any other person pursuant to which any of our nominees, directors or executive officers have been selected for their respective positions. No nominee, member of the Board of Directors or executive officer is related to any other nominee, member of the Board of Directors or executive officer.

For information as to the shares of the Common Stock held by each nominee, see “Security Ownership of Certain Beneficial Owners and Management,” above.

See “Directors and Executive Officers” above for biographical summaries for each of our director nominees.

All directors will hold office for the terms indicated, or until their earlier death, resignation, removal or disqualification, and until their respective successors are duly elected and qualified. There are no arrangements or understandings between any of the nominees, directors or executive officers and any other person pursuant to which any of our nominees, directors or executive officers have been selected for their respective positions. No nominee, member of the Board of Directors or executive officer is related to any other nominee, member of the Board of Directors or executive officer.

PROPOSAL 2

RATIFICATION OF SELECTION OF INDEPENDENT AUDITORS

The Audit Committee has selected Child, Van Wagoner & Bradshaw PLLC (“Child Van Wagoner”) to serve as the independent registered public accounting firm of the Company for the fiscal year ending December 31, 2010. Child Van Wagoner was the Company’s independent registered public accounting firm for the fiscal years ending December 31, 2009, 2008, 2007 and 2006.

We are asking our stockholders to ratify the selection of Child Van Wagoner as our independent registered public accounting firm. Although ratification is not required by our bylaws or otherwise, the Board is submitting the selection of Child Van Wagoner to our stockholders for ratification as a matter of good corporate practice. In the event our stockholders fail to ratify the appointment, the Audit Committee may reconsider this appointment.

The Company has been advised by Child Van Wagoner that neither the firm nor any of its associates had any relationship with the Company other than the usual relationship that exists between independent registered public accountant firms and their clients during the last fiscal year. Representatives of Child Van Wagoner will be available via teleconference during the Meeting, at which time they may make any statement they consider appropriate and will respond to appropriate questions raised at the Meeting.

Independent Registered Public Accounting Firm’s Fees

The following are the fees billed to us by Child Van Wagoner during fiscal years ended December 31, 2009 and 2008:

	<u>2009</u>	<u>2008</u>
Audit Fees	\$ 39,000	\$ 39,506
Audit Related Fees	3,373	-
Tax Fees	-	-
All Other Fees	14,500	4,000
Total	\$ 56,873	\$ 43,506

Audit Fees consist of the aggregate fees billed for professional services rendered for the audit of our annual financial statements and the reviews of the financial statements included in our Forms 10-Q and for any other services that were normally provided by Child Van Wagoner, respectively, in connection with our statutory and regulatory filings or engagements.

Audit Related Fees consist of the aggregate fees billed for professional services rendered for assurance and related services that were reasonably related to the performance of the audit or review of our financial statements and were not otherwise included in Audit Fees.

Tax Fees consist of the aggregate fees billed for professional services rendered for tax compliance, tax advice and tax planning. Included in such Tax Fees were fees for preparation of our tax returns and consultancy and advice on other tax planning matters.

All Other Fees consist of the aggregate fees billed for products and services provided by Child Van Wagoner and not otherwise included in Audit Fees, Audit Related Fees or Tax Fees. Included in such Other Fees were fees for services rendered by Child Van Wagoner in connection with our private and public offerings conducted during such periods.

Our Audit Committee has considered whether the provision of the non-audit services described above is compatible with maintaining auditor independence and determined that such services are appropriate. Before auditors are engaged to provide us audit or non-audit services, such engagement is (without exception, required to be) approved by the Audit Committee of our Board of Directors.

Pre-Approval Policies and Procedures

Under the Sarbanes-Oxley Act of 2002, all audit and non-audit services performed by our auditors must be approved in advance by our Board to assure that such services do not impair the auditors' independence from us. In accordance with its policies and procedures, our Board pre-approved the audit service performed by Child Van Wagoner for our consolidated financial statements as of and for the year ended December 31, 2009.

The Board of Directors recommends a vote FOR ratification of the selection of Child Van Wagoner & Bradshaw PLLC as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2010.

STOCKHOLDER PROPOSALS FOR THE 2011 ANNUAL MEETING

If you wish to have a proposal included in our proxy statement for next year's annual meeting in accordance with Rule 14a-8 under the Exchange Act, your proposal must be received by the Corporate Secretary of Lightbridge Corporation at 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA, no later than the close of business on December 31, 2010. A proposal which is received after that date or which otherwise fails to meet the requirements for stockholder proposals established by the SEC will not be included. The submission of a stockholder proposal does not guarantee that it will be included in the proxy statement.

ANNUAL REPORT ON FORM 10-K

We will provide without charge to each person solicited by this Proxy Statement, on the written request of such person, a copy of our Annual Report on Form 10-K, including the financial statements and financial statement schedules, as filed with the SEC for our most recent fiscal year. Such written requests should be directed to Lightbridge Corporation, c/o Corporate Secretary, 1600 Tysons Boulevard, Suite 550, McLean, Virginia 22102 USA. A copy of our Annual Report on Form 10-K is also made available on our website after it is filed with the SEC.

OTHER MATTERS

As of the date of this Proxy Statement, the Board of Directors has no knowledge of any business which will be presented for consideration at the Meeting other than the election of directors and the ratification of the appointment of the accountants of the Company. Should any other matters be properly presented, it is intended that the enclosed proxy card will be voted in accordance with the best judgment of the persons voting the proxies.

March 29, 2010

By Order of the Board of Directors

/s/ Thomas Graham
Thomas Graham, Jr.
Chairman and Corporate Secretary

APPENDIX A

REPORT OF THE AUDIT COMMITTEE

The Audit Committee of the Board is comprised of three non-employee Directors, each of whom has been determined by the Board to be “independent” under the meaning of Rule 10A-3(b)(1) under the Exchange Act. The Board has determined, based upon an interview of Jack D. Ladd and a review of Mr. Ladd’s responses to a questionnaire designed to elicit information regarding his experience in accounting and financial matters, that Mr. Ladd shall be designated as an “Audit Committee financial expert” within the meaning of Item 401(e) of SEC Regulation S-K, as Mr. Ladd has past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in his financial sophistication. The Audit Committee assists the Board’s oversight of the integrity of the Company’s financial reports, compliance with legal and regulatory requirements, the qualifications and independence of the Company’s independent registered public accounting firm, the audit process, and internal controls. The Audit Committee operates pursuant to a written charter adopted by the Board. The Audit Committee is responsible for overseeing the corporate accounting and financing reporting practices, recommending the selection of the Company’s registered public accounting firm, reviewing the extent of non-audit services to be performed by the auditors, and reviewing the disclosures made in the Company’s periodic financial reports. The Audit Committee also reviews and recommends to the Board that the audited financial statements be included in the Company’s Annual Report on Form 10-K.

Following the end of the fiscal year ended December 31, 2009, the Audit Committee (1) reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2009 with Company management; (2) discussed with the independent auditors the matters required to be discussed by SAS 61 (Codification of Statements on Auditing Standards), as may be modified or supplemented; and (3) received the written disclosures and the letter from the independent accountants required by Independence Standards Board Standard No. 1 (Independence Standards Board Standard No. 1, Independence Discussions with Audit Committees), as may be modified or supplemented, and has discussed with the independent accountant its independence.

Based on the review and discussions referred to above, the Audit Committee had recommended to the Board of Directors that the audited financial statements be included in the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2009 for filing with the SEC.

/s/ The Audit Committee

Jack D. Ladd

Victor E. Alessi

Daniel B. Magraw

**LIGHTBRIDGE CORPORATION
ANNUAL MEETING OF STOCKHOLDERS
TO BE HELD ON APRIL 30, 2010**

This Proxy is Solicited on Behalf of the Board of Directors

The undersigned stockholder of Lightbridge Corporation, a Nevada corporation (the "Company"), acknowledges receipt of the Notice of Annual Meeting of Stockholders and Proxy Statement, dated April 30, 2009, and hereby constitutes and appoints Seth Grae and Thomas Graham, Jr., or either of them acting singly in the absence of the other, with full power of substitution in either of them, the proxies of the undersigned to vote with the same force and effect as the undersigned all shares of the Company's Common Stock which the undersigned is entitled to vote at the 2010 Annual Meeting of Stockholders to be held on April 30, 2010, and at any adjournment or adjournments thereof, hereby revoking any proxy or proxies heretofore given and ratifying and confirming all that said proxies may do or cause to be done by virtue thereof with respect to the following matters:

The undersigned hereby instructs said proxies or their substitutes:

1. Elect as Directors the nominees listed below:

Seth Grae
Thomas Graham, Jr.
Victor E. Alessi
Jack D. Ladd
Daniel B. Magraw

Withhold authority for the following:

- Seth Grae
 Thomas Graham, Jr.
 Victor E. Alessi
 Jack D. Ladd
 Daniel B. Magraw

2. Approve the ratification of Child, Van Wagoner & Bradshaw PLLC as the Company's accountant for fiscal year 2010.
FOR **AGAINST** **ABSTAIN**

3. In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Meeting, and any adjournment or adjournments thereof.
-

THIS PROXY, WHEN PROPERLY EXECUTED, WILL BE VOTED IN THE MANNER DIRECTED; IF NO DIRECTION IS MADE, THIS PROXY WILL BE VOTED FOR ALL NOMINEES AND FOR THE RATIFICATION OF THE SELECTION OF CHILD, VAN WAGONER & BRADSHAW PLLC, AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTANTS. IN THEIR DIRECTION, THE PROXIES ARE ALSO AUTHORIZED TO VOTE UPON SUCH OTHER MATTERS AS MAY PROPERLY COME BEFORE THE MEETING, INCLUDING THE ELECTION OF ANY PERSON TO THE BOARD OF DIRECTORS WHERE A NOMINEE NAMED IN THE PROXY STATEMENT DATED MARCH 29, 2010 IS UNABLE TO SERVE OR WILL NOT SERVE.

I (we) acknowledge receipt of the Notice of Annual Meeting of Stockholders and the Proxy Statement dated March 29, 2010, and the 2009 Annual Report to Stockholders and ratify all that the proxies, or either of them, or their substitutes may lawfully do or cause to be done by virtue hereof and revoke all former proxies.

Please sign, date and mail this proxy immediately in the enclosed envelope.

Name _____

Name *(if joint)*

Date _____, 2010

Please sign your name exactly as it appears hereon. When signing as attorney, executor, administrator, trustee or guardian, please give your full title as it appears hereon. When signing as joint tenants, all parties in the joint tenancy must sign. When a proxy is given by a corporation, it should be signed by an authorized officer and the corporate seal affixed. No postage is required if returned in the enclosed envelope.
