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

FORM 8-K

#### **CURRENT REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest event Reported): October 9, 2009

#### **LIGHTBRIDGE CORPORATION**

(Exact name of small business issuer as specified in its charter)

Nevada	000-28535	91-1975651			
(State or other jurisdiction of	(Commission	(I.R.S. Employer			
of incorporation)	File Number)	Identification No.)			
1600 Tyson's Boulevard, Suite 550, McLean, VA 22102 (Address of Principal Executive Offices)					
	<b>571.730.1200</b> (Registrant's Telephone Number, Including Area Code)				
	(Former name or former address, if changed since last report)	)			
 ropriate box below if the Form 8-K filing i action A.2. below):	is intended to simultaneously satisfy the filing obligation of the	registrant under any of the following provisions ⅇ			
Written communications pursuant to Rul	e 425 under the Securities Act (17 CFR 230.425)				
Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)					
Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))					
Pre-commencement communications pur	rsuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.1	(3e-4(c))			

#### Item 7.01. Regulation FD Disclosure.

On October 9, 2009, Lightbridge Corporation the "Company") made a slide presentation at the NASDAQ Stock Market. A copy of the Company's presentation is furnished herewith as Exhibit 99.1.

The information contained in this current report on form 8-K and the exhibit attached hereto shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, nor shall such information or such exhibit be deemed incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing. The information set forth in or exhibit to this form 8-K shall not be deemed an admission as to the materiality of any information in this report on form 8-K that is required to be disclosed solely to satisfy the requirements of Regulation FD.

#### Item 8.01. Other Events.

On October 9, 2009, the Company issued a press release announcing that it commenced trading on the NASDAQ Capital Market under the trading symbol "LTBR". A copy of the press release is furnished herewith as Exhibit 99.2.

#### Item 9.01. Financial Statements and Exhibits

(c) Exhibits

Exhibit

No. <u>Description</u>

99.1 Slide Presentation of Lightbridge Corporation

99.2 Press Release dated October 9, 2009

#### SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

#### LIGHTBRIDGE CORPORATION

Date: October 9, 2009

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

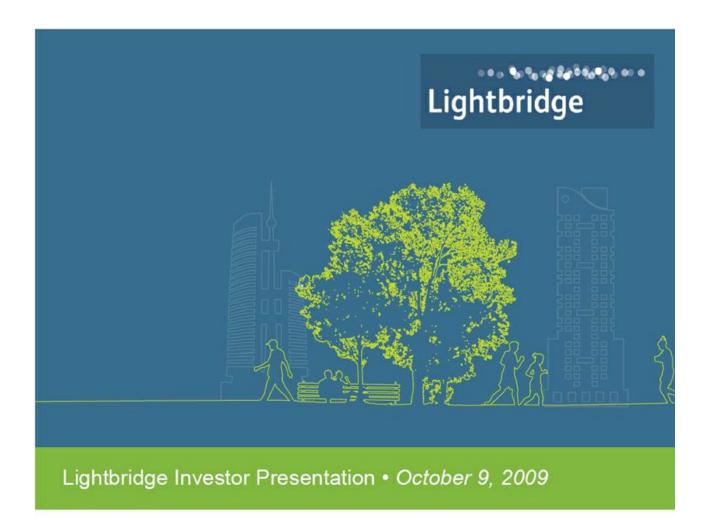
#### EXHIBIT INDEX

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#### Safe Harbor Statement

This presentation includes or incorporates by reference statements that constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Act of 1934, as amended. These statements relate to future events or to our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These statements include, but are not limited to, information or assumptions about revenues, gross profit, expenses, income, capital and other expenditures, financing plans, capital structure, cash flow, liquidity, management's plans, goals and objectives for future operations and growth. In some cases, you can identify forwardlooking statements by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential," "continue," or the negative of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties, and others factors which are, in some cases, beyond our control and which could materially affect actual results, levels of activity, performance or achievements. These risks and uncertainties include, but not limited to. the factors mentioned in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2008, and other risks mentioned in our other reports filed with the Commission.

The forward-looking statements contained in this presentation are made only of this date, and Lightbridge Corporation is under no obligation to revise or update these forward-looking statements.

## What is Lightbridge?



Lightbridge is a leading provider of nuclear energy consulting services to commercial and governmental entities worldwide, and is developing next generation nuclear fuel technology that will significantly reduce nuclear waste and proliferation.

Lightbridge

# Lightbridge at a Glance









NASDAQ Ticker: LTBR

Headquarters: McLean, VA

President and CEO: Seth Grae

Shares Outstanding: 10 million

2008 Revenues: \$22,220, 000

Lightbridge

## Corporate Leadership (1)



#### Seth Grae, President, Chief Executive Officer -

Seth Grae, has led the development and implementation of Lightbridge's business efforts to develop and deploy nuclear fuel technologies, and to provide comprehensive advisory services based on non-proliferation, safety, and transparency for emerging commercial nuclear power programs.

Ambassador Thomas Graham, Jr., Executive Chairman of the Board. - Thomas Graham, Jr. is one of the world's leading experts in nuclear non-proliferation.

Ambassador Graham 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.



Thorium and uranium fuel capsules in this research reactor at Russia's Kurchatov Institute could help reduce waste from existing and future nuclear power plants.

Lightbridge

## Corporate Leadership (2)



James D. Guerra, CPA; Chief Operating & Financial Officer – Served as Vice President of Finance and Chief Financial Officer of Exelon Business Services Company and Exelon Nuclear from 2002 to 2007. At Exelon, Mr. Guerra was an integral member of the team that engineered one of the most significant turnarounds in the history of nuclear energy, bringing that company's nuclear plants from the lower quartile of performance to the top of the industry.

Andrey Mushakov, Executive Vice President, International Nuclear Operations - Mr. Mushakov leads Lightbridge's fuel technology development activities and is the primary liaison between Lightbridge and the Russian nuclear organizations involved in Lightbridge's project.



Lightbridge

## Strategic Advisory Council



- · Victor Chu
- ·Susan Eisenhower
- ·Sir Ronald Grierson
- •General Lord Charles Guthrie
- •RT. Hon. Michael Howard, QC
- ·Nancy "Nana" Lampton

- · Tidu Maini
- · Simon Murray, CBE
- Dr. Charles Pryor, Jr.
- · Ernest Steiner
- John Taylor



Lightbridge's "seed and blanket" fuel assembly model used for thermal-hydraulic testing at the Kurchatov Institute.

Lightbridge has an unrivaled depth of talent with a roster of leading experts and advisors that have served in industry and governmental positions for decades.

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## **Technical Advisory Board**



- ·Robert Ihde
- ·Ronald Murata
- •Thomas Retson
- ·Norton Shapiro, Ph.D
- ·Sam Vaidyanathan, Ph.Dd
- ·Ernie Kennedy



Dr. Alvin Radkowsky (left) , inventor of thorium fuel, receiving an award from the U.S. Atomic Energy Commission. Presented by Admiral H.G. Rickover

Lightbridge's Technical Advisory Board includes experienced industry veterans as well as a new generation of "New Build" innovators with world class leadership in civilian nuclear technology and nuclear power deployment with strong conventional nuclear competencies.

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#### **Investment Rationale**



- Lightbridge offers practical and timely solutions to the emerging nuclear proliferation discussion
  - Proprietary technology addresses the paramount issues afflicting the industry, specifically proliferation and waste
  - Proliferation-resistant fuel
  - Dramatically reduced nuclear waste
- Developing partnerships with leading energy companies and countries seeking to expand its nuclear program; key clients (Areva and the UAE) with exclusive and long-term contracts
- Growing presence in the discussion about the safety and usage of nuclear power
- Lightbridge's advisory services provide the strategic insight that developed and emerging nations need to deploy safe, transparent nuclear programs

Lightbridge

## Lightbridge Overview



Fuel Technology Development

### **Advisory Services**

Combination of these two core businesses puts Lightbridge in a unique position to capitalize on the growing global trend of pursuing cleaner and safer forms of nuclear energy

Lightbridge

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## Our 2009 Focus

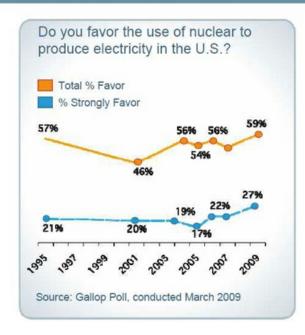


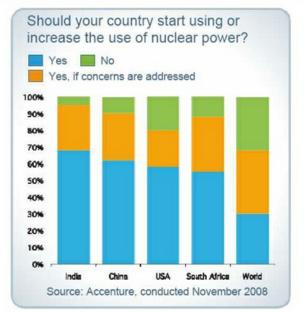
What we've said	What we've delivered
List on a Senior Exchange	NASDAQ Listing on Oct. 9, 2009
Corporate Rebranding	Launch of Lightbridge
Forging Partnerships	Growing work with Areva
Raising Visibility	Proactively telling our story and getting attention

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### Nuclear is on the Rise





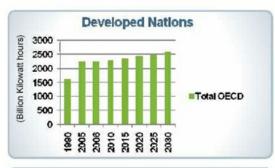


Support for nuclear energy has risen to new high levels in the U.S. and abroad. Over 80% of Americans now favor if concerns are addressed.

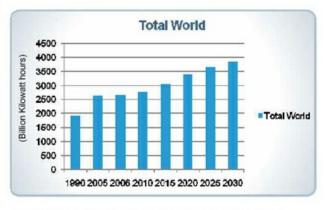
## Leveraging Global Trends



### World Electricity Consumption







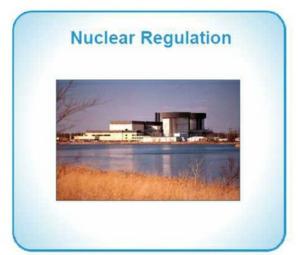
Sources: Energy Information Administration (EIA), International Energy Annual 2006 (June-December 2008); AEO2009 National Energy Modeling System; and World Energy Projections Plus (2009).

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# **Advisory Services**







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## Advisory Services – Prestigious Talent



Ernie Kennedy - 33 year career with Westinghouse, as VP for New Plants, led the successful construction and installation of numerous nuclear power plants world-wide

Jon Johnson - 38 years of nuclear operational and regulatory experience, including as the Deputy Director, Nuclear Reactor Regulation for the U.S. Nuclear Regulatory Commission

Hans Blix – Formerly Director General at the IAEA and Executive Chairman of the UN Monitoring, Verification and Inspection Commission





Leveraging the strongest minds in the global nuclear industry

Lightbridge

## **Advisory Services**



### **Core Strengths**

#### Unbiased Advice and Strategic Planning

- Experienced team of nuclear professionals
- Comprehensive design for nuclear program and related infrastructure

#### **Program Assessment**

- · Technology analysis and site-specific adaptability
- · Contractor, materials, and equipment evaluation

#### Regulatory Compliance

- State-of-the-art nuclear regulatory program design
- Regulatory best practice implementation

Lightbridge provides an unrivaled team of expert analysts and industry practitioners to work with clients establishing a nuclear power program

Lightbridge

### **Advisory Services**



### **Important Milestones**

- 1 Exclusive UAE Contract: Entered into multiple five-year agreements to provide strategic advice for planning and implementation of nuclear energy with United Arab Emirates
  - Providing counsel and advice on this region's nuclear generation capabilities and build-up and regulatory issues/policies
  - Seeking to leverage the work we do in this region to help generate new business opportunities in other regions/countries
  - Our regulatory advisory expertise is unparalleled we have a global team
    of experts that have the capability to establish new, independent
    regulatory agencies from scratch.
- New Offices: Opened Abu Dhabi and UK Branch Offices

Lightbridge continues to successfully execute its corporate strategy as we strive to achieve our vision

Lightbridge

# Fuel Market Overview



# Fuel Technology Development





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## **Fuel Designs**



# Proliferation resistance

- · No weapons usable materials produced
- · Reduced political risk

# Waste volume and storage time reduction

- · Approx. 50% reduction of spent fuel volume
- · Approx. 70% less spent fuel weight
- Approx. 90% reduction of long-term radiotoxicity of spent fuel

#### Supply flexibility

- Ability to utilize thorium reserves
- Mitigates fuel price volatility
- Reduces uranium supply risk

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## **Fuel Technology Development**



Led by Dr. Alexei Morozov – Head of the Lightbridge Moscow office and nuclear scientist with more than 40 years of experience in the development of nuclear technology

Three additional PhD's – all with comparable expertise





Entrance to the Institute with monument to Kurchatov – Russia's leading research and development institution in the field of nuclear energy.

Lightbridge is the leading developer of proliferation resistant fuels

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## **VVER Fuel Development Process**



#### Successful completion of Lead Test Assembly Program Plan

Phase I: Conceptual Design completed

- Define new product and economic feasibility
- · Develop project plan

Phase II: Preliminary Design completed

Preliminary design and fabrication process and validation

Phase III: Detailed Design

· Detailed design and fabrication process and review

Phase IV: Full-Scale Product Testing & Validation

- Regulatory licensing of lead test assembly
- Host reactor/fabrication and irradiation of lead test assemblies/examination after each cycle

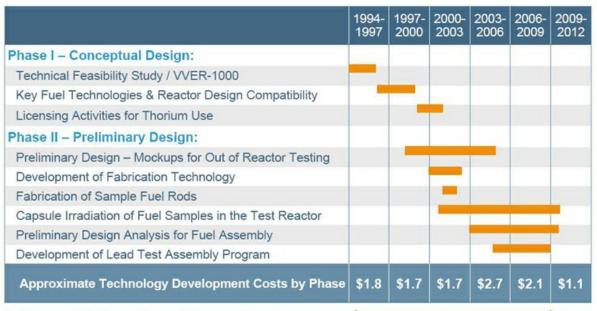
Phase V: Commercial Implementation

- Regulatory licensing for commercial implementation
- License fuel technology to commercial fuel fabricator
- Commercial implementation in nuclear power plants

Lightbridge

# VVER-1000 Fuel Development Program: Baseline Program Schedule (1)





<sup>\*</sup>Includes corporate R&D expenditures and US government grants

Total Development Cost to Date: \$10M

# VVER-1000 Fuel Development Program: Baseline Program Schedule (2)



	2009- 2012	2012- 2015	2015- 2018	2018- 2021
Phase III – Detailed Design:				
Loop Irradiation of Fuel Samples in the Test Reactor				
Detailed Design Analysis for Fuel Assembly	6			
Detailed Design – Mockups for Out of Reactor Testing				
Fabrication Process Design for Lead Test Assembly	- 2			
Phase IV – Full Scale Product Testing and Validation:				
Regulatory Licensing of Lead Test Assembly				
Host Reactor/Fabrication of Lead Test Assemblies/ Irradiation of Lead Test Assemblies/Examination After Each Cycle				
Phase V – Commercial Implementation:				
License Fuel Technology to Commercial Fuel Fabricator			-	
Establish Industrial Scale Fabrication Facility				
Regulatory Licensing for Commercial Implementation				
Commercial Implementation in Nuclear Power Plants				
Approximate Technology Development Costs by Phase*	\$7.8	\$6.1	\$2.0	

\*Includes estimated R&D expenditures for Lightbridge-led work

Activities led by Lightbridge

Activities led by the fuel fabricator

Estimated Future R&D Costs: \$17M (\$15.9M + \$1.1M remaining from Phase II)

## Addressable VVER Fuel Market (India Market Only)



	A	В	C	D	E	F
1	Forecasted VVER Opportunities	Total # of Units	Total Annualized Fuel Market Value*	Market Share Assumptions	Lightbridge Baseline Annualized Fuel Spend	Lightbridge Baseline Annual Licensing Revenue**
2	Existing / Under Construction Reactors	2	\$ 80 M	0% - 50%	\$ OM - \$ 40 M	\$ 0M - \$ 2M
3	Planned Reactors	4	\$ 160 M	25% - 50%	\$ 40M - \$ 80 M	\$ 2M - \$ 4M
4	Proposed Reactors	4	\$ 160 M	25% - 50%	\$ 40M - \$ 80 M	\$ 2M – \$ 4M
5	Totals		\$ 400 M		\$ 80M - \$ 200 M	\$ 4 M- \$ 10M

Success in India's nuclear market would validate our fuel designs and positions Lightbridge to capture greater opportunities in the PWR market

Assumes \$40M annualized fuel spend per year per reactor Assumes Lightbridge revenues are 5% of customers annualized fuel spend through licensing contracts

## **Global PWR Market**





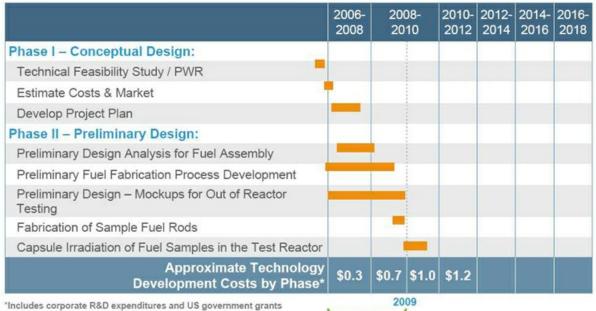
To meet worldwide energy demand requires clean, reliable nuclear energy that also addresses proliferation and waste concerns

Lightbridge

<sup>\*</sup> Does not include VVER reactors
\*\* Eastern Europe (including Russia) and Japan are not considered significant target market segments for insertion of thorium-based fuel into "Western-style" PWRs at this time. source: World Nuclear

## PWR Fuel Development Program: Baseline Program Schedule (1)

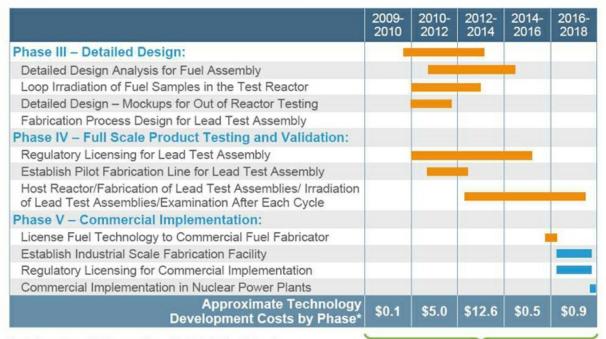




Total Development Cost to Date: \$1.3M

## PWR Fuel Development Program: Baseline Program Schedule (2)





\*Includes estimated R&D expenditures for Lightbridge -led work

Activities led by Lightbridge
Activities led by the fuel fabricator

Estimated Future R&D Costs: \$23.7M (\$21.5M + \$2.2M remaining from Phase II)

## Addressable PWR Fuel Market



	A	В	C	D	E	F
1	Forecasted PWR Opportunities	Total #	Total Annualized Fuel Market Value*	Market Share Assumptions	Lightbridge Baseline Annualized Fuel Spend	Lightbridge Baseline Annual Licensing Revenue**
2	Existing / Under Construction Reactors	195	\$ 7.8 B	5% – 10%	\$390M - \$780M	\$ 20M - \$ 39M
3	Planned Reactors	37	\$ 1.5 B	5% – 15%	\$ 74M - \$ 222M	\$ 4M - \$ 11M
4	Proposed Reactors	122	\$4.9 B	10% – 20%	\$488M - \$976M	\$ 24M – \$ 49M
5	Totals		\$ 14.2 B		\$ 952M - \$ 2.0B	\$ 48M – \$ 99M

PWR market represents greatest market opportunity for Lightbridge and fabrication partner

Lightbridge

Assumes \$40M annualized fuel spend per year per reactor
 Assumes Thorium Power revenues are 5% of customers annualized fuel spend through licensing contracts

## **Partnerships**



#### Intellectual Property - The agreement breaks IP into three categories

- 1. Background IP Each party owns its existing IP
- 2. Reserved Foreground IP Owned by the party under which such future IP is reserved as specified in the approved project plan
- 3. Fully Owned Foreground IP All future IP that was generated as a result of one party's solely carrying out the work is fully owned by such party



#### Technology license for commercial use to AREVA:

- Non-exclusive royalty bearing license for Lightbridge's Background and Reserved or Fully Owned Foreground, with royalty fees to be negotiated in good faith and agreed to at any time in the future
- No commercial use is permitted until a separate technology license agreement has been entered into between the parties
- AREVA also has an option to obtain a 10-year exclusive license for AREVA's light water reactors worldwide within 7 months after the end of each project
- Royalty fees for an exclusive license to be negotiated in good faith and agreed to between the parties in a separate technology license agreement
- Russian VVER reactors are specifically excluded

Lightbridge

## **Partnerships**



- Consulting Agreement signed on August 3, 2009
- · Initial term of 5 years; could be extended upon mutual written consent
- · Agreement covers initial two phases of consulting work



#### Phase 1:

- Includes a preliminary neutronic study of evolutionary thorium fuel concepts (i.e., fuel designs similar to conventional uranium fuel but with an addition of some thorium)
- Phase 1 duration up to 12 months
- Total fixed price for Phase 1 \$550,000

#### Phase 2:

- To be covered under a new statement of work that would be negotiated and included as an addendum to the Consulting Agreement toward the end of work under Phase 1
- Includes a study of Lightbridge's seed and blanket fuel design for application in EPR
- Expected duration of Phase 2 is 14 months
- Pricing to be negotiate

Consulting Agreement signed on August 3, 2009 covers initial two phases of consulting work;

Phase 1 includes a study of evolutionary thorium fuel concepts is currently underway

Lightbridge

## Legislation Initiatives



#### Reid-Hatch Thorium Energy Independence and Security Act of 2008

- · Benefits of the Bill
  - U.S. government support of thoriumbased nuclear fuel development
  - Provides for necessary research and licensing funding
  - Increases international cooperation

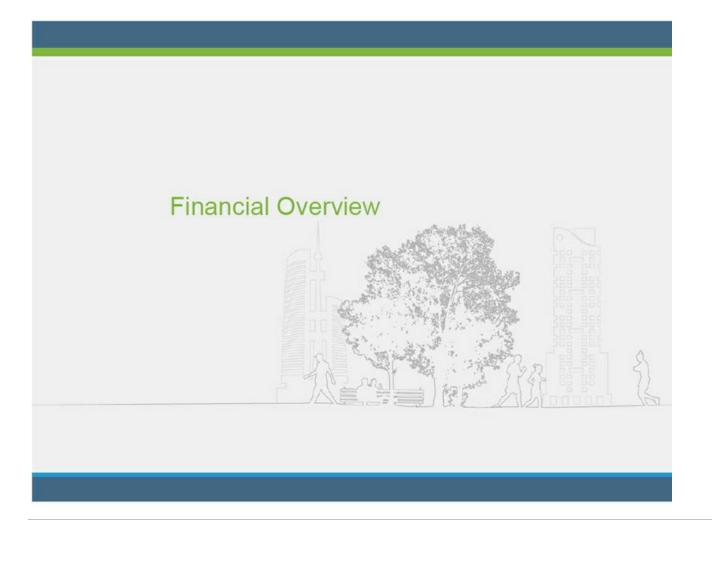


#### **Global 123 Agreements**

- · UAE
- India
- · Benefits of 123 Agreements
  - Bilateral U.S. government support for a country's civilian nuclear energy program
  - Provides presumptive legal authorization to conduct business
  - Levels competitive environment with foreign nuclear service and technology providers

Global government policies moving favorably towards Lightbridge's vision and mission

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# Financial Results – Income Statement

(\$000, except per share amounts)	Six Months Ended June 30, 2009	Twelve Months Ended December 31, 2008
Total Revenue	\$6,375	\$22,220
Cost of Consulting Services Provided	3,637	11,089
Gross Margin	2,737	11,131
Total Operating Expenses	5,618	14,174
Operating Loss	(2,881)	(3,042)
Net Loss	(2,869)	(2,859)
Net Loss per Common Share and Diluted	\$(0.01)	\$(0.01)
Weighted Average Number of Shares Outstanding for the Period Used to Compute per Share Data	301,755	300,071

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## Financial Results – Balance Sheet

	June 30, 2009 (Unaudited)	Dec. 31, 2008
Cash and cash equivalents	\$4,910	\$5,580
Total Current Assets	10,127	11,982
Total Assets	10,595	12,447
Total Current Liabilities	3,638	5,139
Total Liabilities	3,638	5,139
Total Stockholders' Equity	6,957	7,308
Total Liabilities and Shareholders Equity	10,595	12,447

## Clean capital structure with no debt

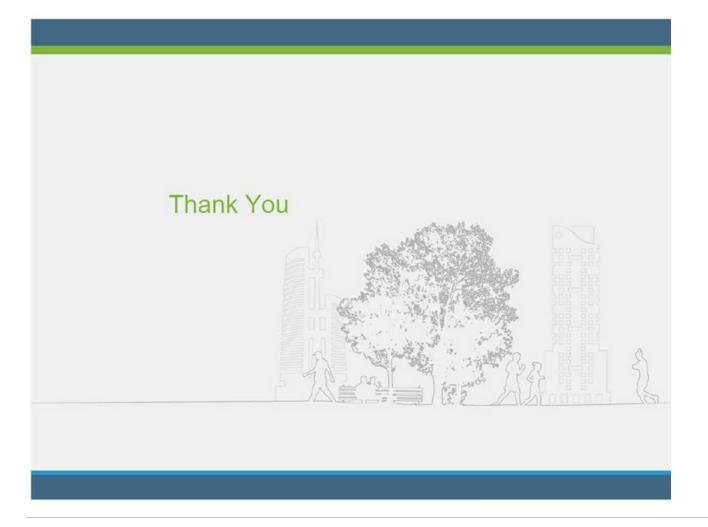
Lightbridge

#### **Investment Rationale**



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- Lightbridge's consulting advisory services provide the strategic insight developed and emerging nations need in developing safe, transparent nuclear programs

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#### Contacts:

Jim Guerra Lightbridge Corporation 571-730-1203 Greg Jawski Ogilvy Public Relations 212-880-5353

#### Lightbridge Corporation Lists on NASDAQ Capital Market

MCLEAN, Va. -- Oct. 9, 2009 – Lightbridge Corporation (NASDAQ: LTBR), the leading developer of non-proliferative nuclear fuel technology and provider of comprehensive advisory services for civil nuclear energy programs, today announced that it has been listed on the NASDAQ Capital Market and effective today is trading under the symbol "LTBR." The Company's management team, led by President and CEO Seth Grae and Lightbridge Senior Advisor Hans Blix, will today ring the closing bell at NASDAQ's market site.

Mr. Grae commented, "We are pleased to list Lightbridge on a senior exchange. This is an important step in the company's growth and one that will provide greater liquidity and visibility in the markets and allow us to broaden our reach to prospective investors. A leader in its industry, Lightbridge will be able to experience the benefits of an electronic exchange, with access to highly efficient trading in a highly transparent and competitive market."

Lightbridge is a leading provider of nuclear energy consulting services internationally and is developing next generation nuclear fuel technology that will significantly reduce nuclear waste and the threat of proliferation. The combination of two core businesses puts Lightbridge in a unique position to capitalize on the global nuclear renaissance and growing trend of pursuing cleaner and safer forms of nuclear energy. The Company has an unrivaled depth of talent with a roster of leading experts and advisors that have served in industry and governmental positions for decades.

#### **About Lightbridge Corporation**

Lightbridge is a U.S. nuclear energy company based in McLean, VA. with operations in Abu Dhabi, Moscow and London. The Company develops non-proliferative nuclear fuel technology and provides comprehensive advisory services for established and emerging nuclear programs based on a philosophy of transparency, non-proliferation, safety and operational excellence. Lightbridge's breakthrough fuel technology is establishing new global standards for safe and clean nuclear power and leading the way towards a sustainable energy future. Lightbridge consultants provide integrated strategic advice and expertise across a range of disciplines including regulatory affairs, nuclear reactor procurement and deployment, reactor and fuel technology and international relations. It leverages those broad and integrated capabilities by offering their services to commercial entities and governments with a need to establish or expand nuclear industry capabilities and infrastructure.

Further information is available on Lightbridge's website at: http://www.Ltbridge.com