
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 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 20, 2014

LIGHTBRIDGE CORPORATION

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

Nevada
(State or other jurisdiction of
of incorporation)

001-34487
(Commission
File Number)

91-1975651
(I.R.S. Employer
Identification No.)

**1600 Tysons Boulevard, Suite 550
McLean, VA 22102**
(Address of Principal Executive Offices)

571.730.1200
(Registrant's Telephone Number, Including Area Code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 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 pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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Item 7.01 Regulation FD Disclosure

On October 20, 2014, Lightbridge Corporation issued a press release announcing an initial cooperation agreement with Atomic Energy of Canada Limited (AECL). A copy of the press release is furnished as exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits

(d) Exhibits

99.1 [Press Release, dated October 20, 2014, issued by Lightbridge Corporation](#)

SIGNATURES

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

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

October 20, 2014

**LIGHTBRIDGE AND CANADA'S NUCLEAR SCIENCE & TECHNOLOGY ORGANIZATION
SIGN COOPERATIVE AGREEMENT TO ADVANCE DEMONSTRATION OF
LIGHTBRIDGE'S NUCLEAR FUEL**

MCLEAN, Va. – October 20, 2014 – Lightbridge Corporation (NASDAQ: LTBR), a U.S. nuclear energy company, today announced it has signed an initial cooperation agreement with Atomic Energy of Canada Limited (AECL) for fabrication and test reactor irradiation of Lightbridge's patented next generation metallic nuclear fuel samples. The work will take place at AECL's facilities at Chalk River, Ontario, Canada.

"This cooperation agreement is an extraordinary milestone for Lightbridge, giving us the opportunity to perform at one location the most critical phase of fuel testing and demonstration work prior to lead test assembly operation in a commercial reactor," said Lightbridge President and Chief Executive Officer Seth Grae. "Our patented metallic fuel design for power uprates and longer fuel cycles is safer and more cost-efficient than conventional nuclear fuel."

Grae said that work is expected to begin in the fourth quarter of 2014. "This agreement is important because it allows for fabrication and research reactor testing of Lightbridge-designed metallic fuel within our planned timelines for these critical path activities," he added. "AECL has state-of-the-art fuel fabrication and test facilities where fuel samples can be fabricated and irradiated in a pressurized water loop of the National Research Universal reactor at operating conditions close to prototypic for a power reactor. AECL facilities also can accommodate post-irradiation examination of irradiated fuel samples."

The joint work will proceed in three phases that will address:

- Quality management planning to ensure compliance with the U.S. Nuclear Regulatory Commission requirements for fabrication and loop irradiation testing of fuel samples (Phase I);
- Development of a fabrication plan and a preliminary experiment design for loop irradiation testing (Phase II); and
- Fabrication and irradiation of Lightbridge-designed metallic fuel samples (Phase III).

The Initial Cooperation Agreement enables the Phase I work. Over the next several months, the parties intend to complete negotiations relating to two other enabling agreements:

- Nuclear Engineering Services Agreement that will address Phase II; and
- Umbrella Services Agreement that will provide a comprehensive legal framework for multi-year cooperation between the parties to enable the final phase of work to proceed.

The Initial Cooperation Agreement is non-exclusive and does not prevent either party from working with other fuel fabrication or fuel development partners.

Lightbridge is developing and commercializing next generation nuclear fuel technology with indicated benefits to electric utilities of improving the safety and operating economics of existing and new pressurized water reactors. The Company also provides comprehensive advisory services for established and emerging nuclear programs, based on transparency, non-proliferation, safety and operational excellence.

The global commercial nuclear energy industry is projected to grow rapidly as demand for reliable, carbon-free, base load electric power skyrockets. There are currently 435 operating civil nuclear reactors in 32 countries around the world, with an additional 71 reactors under construction, according to the World Nuclear Association. By 2035, the International Energy Agency of the Organization for Economic Cooperation and Development projects a 60% increase in nuclear capacity from a combination of power uprates and reactor construction.

"Lightbridge has achieved several other important milestones in 2014 related to the development of its innovative metallic nuclear fuel technology," Grae added. In February, the U.S. Patent and Trademark Office (USPTO) approved and issued to Lightbridge the key patent (#8,654,917) covering Lightbridge's multi-lobed metallic fuel rod design and fuel assemblies. In July, the Company was issued its first international patent on its fuel rod design by the Commonwealth of Australia Patents Office. "We believe that these patents are essential to securing the Company's future royalty revenue stream from our fuel technology," Grae said."

About Lightbridge Corporation

Lightbridge is a US nuclear energy company based in McLean, Virginia with operations in Abu Dhabi, London, Moscow and Seoul. The Company develops proprietary, proliferation resistant, next generation nuclear fuel technologies for current and future nuclear reactor systems. The Company also 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 to 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. The Company leverages those broad and integrated capabilities by offering its services to commercial entities and governments with a need to establish or expand nuclear industry capabilities and infrastructure.

Lightbridge is on Twitter. Sign up to follow @LightbridgeCorp at <http://twitter.com/lightbridgecorp>.

Forward Looking Statements

This news release contains statements that are forward-looking in nature within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's competitive position and product and service offerings. These statements are based on current expectations on the date of this news release and involve a number of risks and uncertainties that may cause actual results to differ significantly from such estimates. The risks include, but are not limited to, the degree of market adoption of the Company's product and service offerings; market competition; dependence on strategic partners; and the Company's ability to manage its business effectively in a rapidly evolving market. Certain of these and other risks are set forth in more detail in Lightbridge's filings with the Securities and Exchange Commission. Lightbridge does not assume any obligation to update or revise any such forward-looking statements, whether as the result of new developments or otherwise.

MEDIA AND INVESTOR CONTACT:

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