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# Lightbridge Awarded U.S. Patent for Metallic Nuclear Fuel Assembly Design

**Accelerates plans to test fuel in a U.S. research reactor by 2020 and demonstrate fuel in a U.S. commercial reactor by 2021**

RESTON, Va., June 20, 2018 (GLOBE NEWSWIRE) -- [Lightbridge Corporation](#) (NASDAQ:LTBR), a nuclear fuel technology company, today announced it was awarded a key patent from the U.S. Patent and Trademark Office related to its metallic nuclear fuel assembly design. Design advantages of Lightbridge's advanced metallic fuel technology include:

- improved reactor operating economics (increased power output and longer refueling cycles);
- enhanced safety (1000 degrees C cooler and does not reach temperatures to produce hydrogen);
- reduced waste and increased proliferation resistance of spent fuel;
- ability to load follow for pairing with renewable energy sources;
- extended licensed reactor life.

Seth Grae, President & Chief Executive Officer of Lightbridge Corporation, commented: "With this key patent now granted in the United States, we are moving forward aggressively with plans to commence testing of our fuel in a U.S. research reactor by 2020, as well as deploy a lead test rod in a U.S. commercial reactor by 2021. We are grateful and encouraged by the industry support for our fuel technology, which has allowed us to accelerate our commercial deployment timeline."

"The segmented rod in a commercial reactor will allow us to demonstrate and test different variants of the fuel with one commercial-length rod, rather than with several smaller rodlets in the Halden research reactor. The combination of the lead test rod and irradiation testing in U.S. research reactors will allow us to conduct the entire testing program in the United States. We expect later this year or early next year to announce formal arrangements for the lead test rod program with a U.S. nuclear utility."

This latest patent extends Lightbridge's patent portfolio coverage in the United States to cover an entire metallic fuel assembly design for Western-type pressurized water reactors, which comprise two-thirds of those in operation worldwide. Lightbridge's metallic fuel designs can also be adapted for use in nearly all other types of power reactors around the world.

## About Lightbridge Corporation

Lightbridge (NASDAQ:LTBR) is a nuclear fuel technology development company based in Reston, Virginia, USA. The Company develops proprietary next generation nuclear fuel technologies for current and future reactors, which significantly enhances the economics and

safety of nuclear power, operating about 1000° C cooler than standard fuel. In January 2018, Lightbridge and Framatome, Inc. formed a 50-50 joint venture, Enfission, LLC, to develop, license, manufacture, and sell nuclear fuel assemblies based on Lightbridge-designed metallic fuel technology and other advanced nuclear fuel intellectual property. Enfission has the exclusive rights to this technology and is responsible for the development of manufacturing processes and fuel assembly designs for pressurized water reactors (PWRs), boiling water reactors (BWRs), water-cooled small modular reactors, and water-cooled research reactors developed around this intellectual property. PWRs and BWRs constitute the most widely used reactor types in the world. Four large electric utilities that generate about half the nuclear power in the US already advise Lightbridge on fuel development and deployment. In addition to distributions from Enfission based on the parties' ownership interest in the joint venture, Lightbridge anticipates receiving future licensing revenues in connection with sales by Enfission of nuclear fuel incorporating its intellectual property. Lightbridge also provides comprehensive advisory services for established and emerging nuclear programs based on a philosophy of transparency, non-proliferation, safety and operational excellence. For more information please visit: [www.ltbridge.com](http://www.ltbridge.com).

To receive Lightbridge Corporation updates via e-mail, subscribe at <http://ir.ltbridge.com/alerts.cfm>.

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## **Forward Looking Statements**

*With the exception of historical matters, the matters discussed in this news release are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's joint venture operating agreement and other binding agreements with Framatome, the expected cooperation between Framatome and the Company, the ability of commercial nuclear utilities to generate more electricity from their nuclear power plants using Lightbridge fuel, and that the economic and safety benefits of our fuel will encourage greater use of nuclear power. 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; demand for fuel for nuclear reactors; the Company's ability to manage its business effectively in a rapidly evolving market; as well as other factors described 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. Readers are cautioned not to put undue reliance on forward-looking statements.*

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Source: Lightbridge Corporation