

June 28, 2018



# Lightbridge Receives Patent Approval for Advanced Metallic Fuel Rod and Fuel Assembly Design in Japan

RESTON, Va. , June 28, 2018 (GLOBE NEWSWIRE) -- [Lightbridge Corporation](#) (NASDAQ:LTBR), a nuclear fuel developer, today announced today that it has received a Notice of Allowance for a new patent in Japan related to Lightbridge's innovative metallic fuel rod and fuel assembly design. This patent is the latest addition to the Company's growing intellectual property portfolio and follows similar approvals in other markets worldwide.

The new patent is based on Lightbridge's 2014 Patent Cooperation Treaty (PCT) application and covers an alternative embodiment of a multi-lobe fuel rod design; an all-metal pressurized water reactor (PWR) fuel assembly design incorporating multi-lobe fuel rods based on the alternative embodiment; and an all-metal PWR fuel assembly design incorporating multi-lobe fuel rods arranged into a mixed grid pattern, thereby covering the all-metal fuel assembly design after the most recent optimization.

Seth Grae, President & Chief Executive Officer of Lightbridge Corporation, commented, "Japan represents an important market for our fuel. In particular, our fuel is designed to operate up to 1000 degrees C cooler and therefore does not reach temperatures to produce hydrogen during a design-basis loss-of-coolant accident. In addition, our fuel improves the operating economics of existing plants through increased power output and longer refueling cycles. As a result, we believe Lightbridge fuel will play an important role in Japan's nuclear plant restart efforts."

According to World Nuclear Association, Japan has 42 operable nuclear reactors, with a combined net capacity of 40 GWe. At the beginning of 2018, only five reactors had been brought back online, with a further 21 in the process of restart approval following the Fukushima accident in 2011. In the past, nuclear power accounted for 30% of the country's electricity.

## 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