May 11, 2021

Lightbridge Demonstrates High-Temperature Coextrusion of Surrogate Fuel Rods for Commercial-Scale Small Modular Reactors

RESTON, Va., May 11, 2021 (GLOBE NEWSWIRE) -- Lightbridge Corporation ("Lightbridge," or the "Company") (NASDAQ: LTBR), an advanced nuclear fuel technology company, today announced it has successfully demonstrated the manufacturing process for three-lobe, six-foot rods using surrogate materials. This demonstration of Lightbridge's proprietary manufacturing process uses an internally developed and patented high-temperature coextrusion process.

The six-foot length of the surrogate rods is the typical length of the fuel rods used by many small modular reactors (SMRs) now in development and licensing. Future fabrication of high-assay low-enriched uranium (HALEU) rodlets for loop irradiation testing in the Advanced Test Reactor, and ultimately commercial length HALEU fuel rods, will use similar extrusion and casting techniques to create material chemistry and grain structures representative of Lightbridge Fuel™. Performing fabrication development activities with surrogate materials allows Lightbridge to use a broader range of suppliers and is a cost-effective approach as it does not require uranium material.

Seth Grae, President & CEO of Lightbridge Corporation, said: "We are pleased to have physically produced these surrogate rods with this demonstration of our high-temperature coextrusion process at a length designed for small modular reactors. We are developing Lightbridge Fuel™ to enable SMRs to economically load follow, ramping up and down in power as renewables are available, and further enhance the safety of SMRs that utilize natural circulation to maintain core cooling. Lightbridge Fuel™ can reduce the cost of generating electricity from an SMR, while delivering to both SMRs and large reactors increased power output, safety improvements, and enhanced non-proliferation benefits. Powering SMRs with Lightbridge Fuel™ can strengthen the business case for deploying large numbers of SMRs, an essential component needed towards delivering upon climate goals."

Lightbridge Fuel cladding alloy blanks.
https://www.globenewswire.com/NewsRoom/AttachmentNg/7369f7d7-c31f-46d4-99e8-2b685d661f04

Surrogate rod coextrusion billets and components.
https://www.globenewswire.com/NewsRoom/AttachmentNg/88feb1c9-85c8-42a1-af3b-897c846fa0fa

About Lightbridge Corporation

Lightbridge (NASDAQ: LTBR) is an advanced nuclear fuel technology development company positioned to enable carbon-free energy applications that will be essential in preventing climate change. The Company is developing Lightbridge Fuel™, a proprietary next-generation nuclear fuel technology for Small Modular Reactors, as well as existing large light-water reactors, which significantly enhances reactor safety, economics, and fuel proliferation resistance. To date, Lightbridge has been awarded twice by the U.S. Department of Energy's Gateway for Accelerated Innovation in Nuclear program to support development of Lightbridge Fuel™. Lightbridge's innovative fuel technology is backed by worldwide patents. For more information please visit: www.ltbridge.com.

To receive Lightbridge Corporation updates via e-mail, subscribe at https://www.ltbridge.com/investors/news-events/email-alerts

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

Forward Looking Statements

With the exception of historical matters, the matters discussed herein are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the timing and outcome of research and development activities, other steps to commercialize Lightbridge Fuel™ and future governmental support and funding for nuclear energy. 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 Company's ability to commercialize its nuclear fuel technology; the degree of market adoption of the Company's product and service offerings; the Company's ability to fund general corporate overhead and outside research and development costs; market competition; our ability to attract and retain qualified employees; dependence on strategic partners; demand for fuel for nuclear reactors, including small modular reactors; the Company's ability to manage its business effectively in a rapidly evolving market; the availability of nuclear test reactors and the risks associated with unexpected changes in the Company's fuel development timeline; the increased costs associated with metallization of our nuclear fuel; public perception of nuclear energy generally; changes in the political environment; risks associated with the further spread of COVID-19, including the ultimate impact of COVID-19 on people, economies, and the Company's ability to access capital markets; changes in the laws, rules and regulations governing the Company's business; development and utilization of, and challenges to, our intellectual property; risks associated with potential shareholder activism; potential and contingent liabilities; 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, except as required by law. Readers are cautioned not to put undue reliance on forward-looking statements.

A further description of risks and uncertainties can be found in Lightbridge's Annual Report on Form 10-K for the fiscal year ended December 31, 2020 and in its other filings with the Securities and Exchange Commission, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Statements", all of which are available at http://www.sec.gov/ and www.ltbridge.com.

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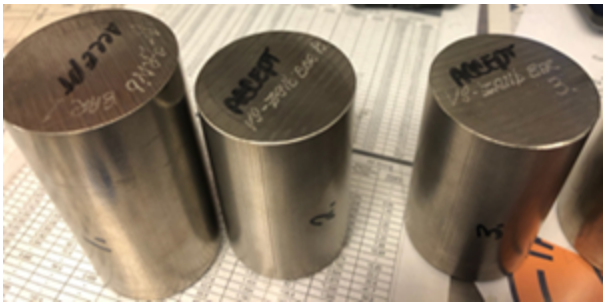
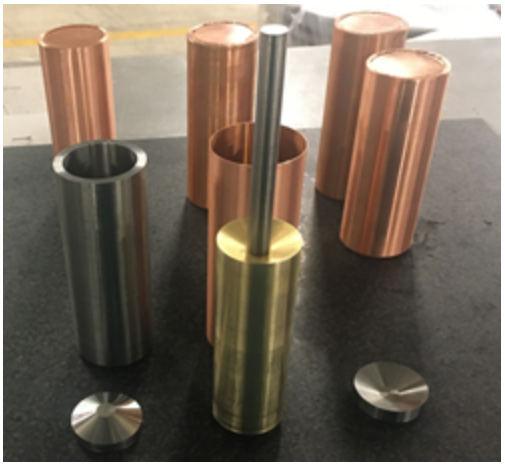
Source: Lightbridge Corporation

Lightbridge Fuel cladding alloy blanks.



Lightbridge Fuel cladding alloy blanks.

Surrogate rod coextrusion billets and components.



Surrogate rod coextrusion billets and components.